

Understanding E-Commerce in Rural Georgia



Prepared for the Georgia Rural Economic Development Center at
East Georgia College

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Prepared for

Georgia Rural Economic Development Center

Prepared by

Georgia Tech's Enterprise Innovation Institute

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EXECUTIVE SUMMARY

From September 2008 through February 2009, the Georgia Tech Enterprise Innovation Institute (EI²) conducted a series of focus groups and a survey of businesses regarding how they use, or would like to use, e-commerce activities to expand their business operations.

In total, 262 businesses participated in the survey and 17 participated in focus groups held in Albany, Carrolton, and Swainsboro, Georgia. Approximately one-third of businesses were manufacturers, and the remaining two-thirds represented industries as varied as professional services, agricultural and related activities, retail trade, and construction. About one-third of businesses identified themselves as located in a rural county (defined by non-metropolitan areas¹). Only 51.1 percent of participating businesses had fewer than 10 employees, compared to 73.2 percent of all businesses in the state being this size.²

The survey and focus group responses resulted in these primary findings:

- Businesses have limited financial resources to pursue their desired e-commerce activities.
- To enhance their e-commerce knowledge, businesses have a strong interest in a classroom-based learning experience and a comprehensive Web site learning resource.
- Many businesses have questions about how to determine which electronic tools, professional service providers, and other resources are the best to use to expand their e-commerce activities.
- Broadband access remains a challenge for rural Georgia's ability to maximize businesses' full e-commerce; and thus, their full market potential.

These findings confirm that businesses throughout Georgia would benefit from more learning opportunities, and the continued pursuit of funding opportunities to enhance broadband connectivity throughout the state.

¹ Non-metropolitan areas include both micropolitan statistical areas and areas not designated as either metropolitan or micropolitan. Metropolitan and micropolitan statistical areas are defined by standards written by the U.S. Office of Management and Budget. For more information, visit <http://www.census.gov/population/www/metroareas/metroarea.html>.

² Data source: U.S. Census Bureau 2006 County Business Patterns.

INTRODUCTION

As Internet usage continues to spread rapidly and its applications multiply and diversify around the globe, electronic commerce (e-commerce) presents an exciting opportunity to tap into new markets and increase profits for businesses of all types and sizes. As a general definition, e-commerce includes a wide variety of commercial, governmental, and personal activities involving the exchange of information and/or data between two or more parties by means of computer and telecommunications networks.³

E-commerce is growing quickly in the United States. In just one year, from 2005 to 2006, e-commerce sales grew more than twice as fast as total sales in the U.S. economy (13.9 percent and 6.8 percent, respectively).⁴ The two most common forms of e-commerce are Business-to-Consumer (B2C) and Business-to-Business (B2B). While B2C describes e-commerce activities in which businesses sell products or services to customers as end users, B2B transactions involve the exchange of products or services between businesses. Although B2C has received a lot of press, B2B transactions by manufacturers and wholesalers accounted for an overwhelming majority - 92.5 percent - of all e-commerce transactions in 2006. About 14 percent of total U.S. transactions (both B2C and B2B) are attributed to e-commerce. Manufacturing led all other industry sectors with 31.2 percent (\$1.6 billion) of total manufacturer's shipments that occurred through e-commerce.⁵

The data show that more and more businesses are taking advantage of e-commerce opportunities for both B2C and B2B activities. Increasingly, businesses are finding e-commerce as a means of cutting marketing costs; for example, compared to the cost of printing and mailing brochures and similar materials, the cost of hosting a 24-hour Web site presence is minimal. Additionally, businesses have found that a strong e-commerce presence allows them an opportunity to connect with customers that they would not otherwise be able to. This electronic connectivity can be particularly valuable to businesses in rural areas, which have fewer prospective customers in close proximity for person-to-person communications and transactions.

To better understand the e-commerce-related needs specific to businesses in rural Georgia, the Georgia Tech Enterprise Innovation Institute (EI²) distributed a survey and conducted a series of focus groups directed toward Georgia's businesses in non-urban areas. Sponsored by the Georgia Rural Economic Development Center (GREDC) at East Georgia College, this initiative provided nearly 300 businesses the opportunity to share their experiences and desires related to e-commerce.

This report summarizes the findings of the survey and focus groups conducted from September 2008 through February 2009. The intended design of the process was to inform activities addressing the priority needs and concerns of businesses in rural Georgia seeking growth via e-commerce. This research was driven by the sense that businesses in rural areas may have less access to markets than those in urban areas; and therefore, may have more to gain by expanding their e-commerce channels than their urban counterparts.

³Chan, E. and Swatman, P. (1999). *Electronic Commerce: A Component Model*. <http://dlibrary.acu.edu.au/staffhome/elchan/pub/1999-1.pdf>.

⁴ U.S. Census Bureau (2008). *E-Stats Report*. <http://www.census.gov/eos/www/2006/2006reportfinal.pdf>. The Census Bureau made several assumptions to simplify their analysis. Manufacturing and wholesale e-commerce is entirely B2B and retail and service e-commerce is entirely B2C. The totals neglect agriculture, mining, utilities, construction agents, brokers, and electronic markets in wholesale trade and one-third of service-related industries.

⁵ Data source: U.S. Census Bureau (2008). *E-Stats Report*. Table 7. <http://www.census.gov/econ/estats/2006/table7.pdf>.

PROJECT APPROACH

The initial phase of this project examined results from similar survey processes; however, only a limited number of efforts were uncovered. Information gathered from this search is presented in the “Other Research Findings” section near the conclusion of this report.

This project’s survey instrument was developed in both print and electronic formats (using the online service SurveyMonkey), based on the collective expertise and knowledge of EI² in survey methodology, business practices, and e-commerce activities. The survey was then distributed electronically using EI² business contacts, as well as the contacts of EI² partners (listed in the “Acknowledgments”). In the distribution, every effort was made to encourage participation from businesses in rural areas; specifically, the persons within those businesses who would be most knowledgeable about the e-commerce operations and potential of the business. When contacting partners via e-mail to assist in the electronic distribution of the survey, researchers also provided the print version of the survey for those without access to, or with limited comfort level with, the online survey format.

The focus groups were identified early in the project as a small, but key, part of the process, as the first-hand, conversational accounts of participants provided helpful flavor to the survey responses. Again, EI² pursued the locating and scheduling of these meetings with supportive partners (also listed in the “Acknowledgments”).

SURVEY RESPONDENTS

A total of 262 persons representing businesses throughout the state participated in the survey.⁶ Several questions were designed to develop a general understanding of what types of businesses participated. The business characteristics convey a sense of the types of businesses that are interested in learning more about e-commerce (based on the assumption that otherwise they may not have chosen to participate in the survey).

This analysis also provides a means of determining whether the types of businesses that composed the primary target audience for this process participated in the survey. The primary target audience was businesses in rural Georgia (loosely defined as non-metropolitan areas⁷) looking to expand their e-commerce business activity; or more specifically, individuals who would be most likely to make decisions about implementing e-commerce initiatives within the businesses they represented. Overall, most of the survey respondents fell within these characteristics.

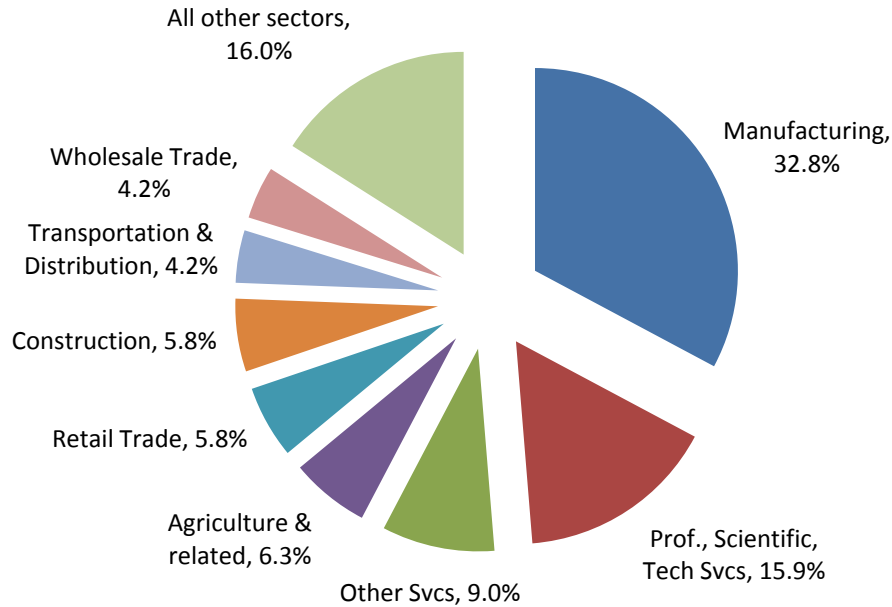
⁶ Not all respondents answered all of the questions in the survey. Therefore, in the report findings, the number of respondents for each question is noted.

⁷ Non-metropolitan areas include both micropolitan statistical areas and areas not designated as either metropolitan or micropolitan. Metropolitan and micropolitan statistical areas are defined by standards written by the U.S. Office of Management and Budget. For more information, visit <http://www.census.gov/population/www/metroareas/metroarea.html>.

About the Companies

Which of these business sectors best describes your company's primary operations?

189 respondents

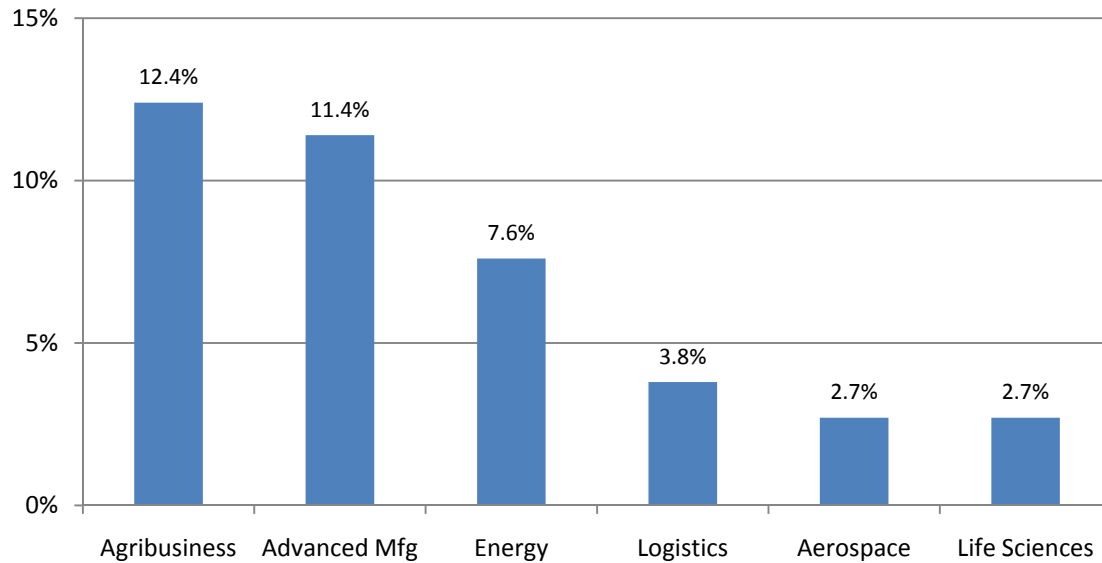


About one-third (32.8 percent) of participating businesses were manufacturers. Sixteen percent identified themselves as providing professional, scientific, or technical services,⁸ and 9.0 percent identified themselves as involved in "other services."⁹ Other sectors represented included agriculture and related activities (6.3 percent), retail trade (5.8 percent), construction (5.8 percent), transportation and distribution (4.2 percent), and wholesale trade (4.2 percent).

⁸ Professional, scientific, and technical services, an official North American Industry Classification System (NAICS) business sector classification, includes consulting, legal, accounting, architecture, engineering, design, research and development (R&D) services, advertising, marketing, and veterinary services.

⁹ "Other services," an official NAICS business sector classification, includes repair and maintenance, hair/nail/skin care services, death care services, dry cleaning/laundry services, religious organizations, grant-making/giving services, social advocacy organizations, civic/social organizations, and business/professional/labor/political organizations.

Which, if any, of the following strategic industries of the State of Georgia does your business fall within?¹⁰
185 respondents



Georgia has six core industries identified as priorities for economic development, due to their strategic significance to the state's economy.¹¹ About 40 percent of surveyed businesses identified themselves as within one of these industries, with the largest shares in agribusiness (12.4 percent) and advanced manufacturing (11.4 percent).

The following graph provides an illustration of the above results divided between metropolitan and non-metropolitan areas (henceforth referred to as "rural"¹²). Rural businesses identified themselves as primarily within agribusiness (19.2 percent) and advanced manufacturing (13.7 percent). Metro area respondents identified themselves mostly in either advanced manufacturing (9.0 percent) or energy (6.7 percent).

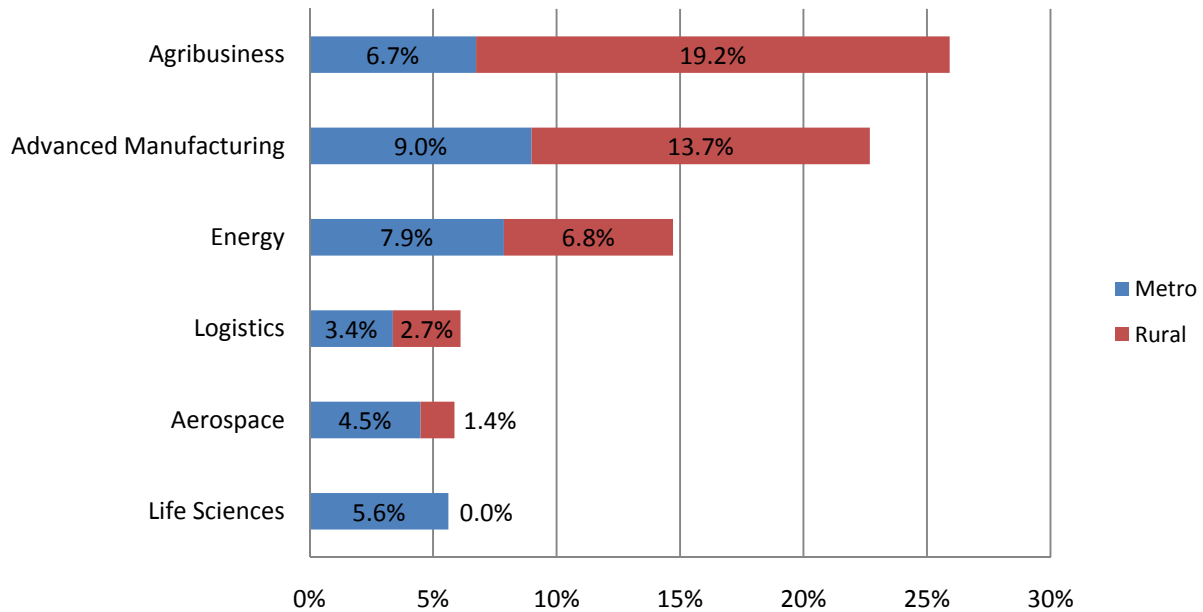
¹⁰ Responses do not add to 100 percent because businesses that did not indicate they were within a strategic industry are not illustrated.

¹¹ The Commission for a New Georgia identified these strategic industries for the State of Georgia in 2004. Commission for a New Georgia. *Strategic Industries Task Force Final Report*. August 10, 2004. <http://newgeorgia.org/newsletters/Strategic%20Industries%20Final%20Report.pdf>

¹² Non-metropolitan areas include both micropolitan statistical areas and areas not designated as either metropolitan or micropolitan. Metropolitan and micropolitan statistical areas are defined by standards written by the U.S. Office of Management and Budget. For more information, visit <http://www.census.gov/population/www/metroareas/metroarea.html>.

Metro and Rural Areas: Which, if any, of the following strategic industries of the State of Georgia does your business fall within?¹³

73 responded¹⁴



What type of business location do you represent?

189 total respondents, 89 metro respondents, 76 rural respondents¹⁵

	All Businesses	Metro Businesses	Rural Businesses
Sole location	81.0%	78.7%	81.6%
Branch location, HQ elsewhere in U.S.	8.5%	7.9%	10.5%
HQ, several branch locations	6.9%	7.9%	6.6%
Branch location, HQ elsewhere in GA	3.2%	4.5%	1.3%
Branch location, HQ outside U.S.	0.5%	1.1%	0.0%

The majority of respondents - about 88 percent - represented the headquarters location of their business (whether that business had just one or multiple locations).

Over three-quarters of businesses from both metro and rural areas represented a sole location. Rural businesses represented more single-location firms (81.6 percent) than metro area businesses (78.7 percent). Metro area respondents representing a headquarters location (7.9 percent) numbered more than rural businesses (6.6 percent).

¹³ Responses do not add to 100 percent because businesses that did not indicate they were within a strategic industry are not illustrated.

¹⁴ The number of respondents represents those who answered both this question, as well as the question that addressed the location of the business (i.e., rural or metro). This is true of all data illustrated in this report as a metro or rural subset of the total.

¹⁵ The difference between 189 and the sum of 89 and 76 (165) represents those who answered this question, but did not answer the question regarding the location of their business (i.e., rural or metro).

How many people does your company employ at all locations?

190 respondents

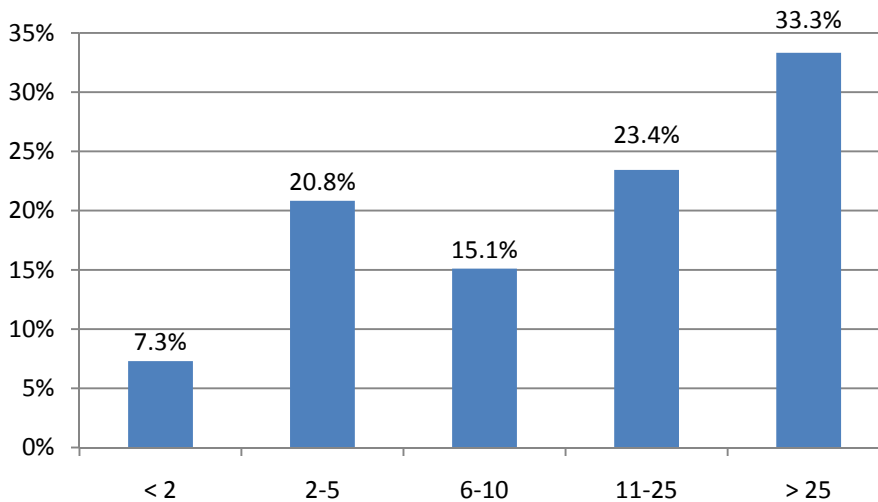
	1-9	10-24	25-49	50-99	100-499	500+
Respondents	51.1%	21.6%	8.9%	4.2%	7.4%	6.8%
Manufacturers	24.6%	24.6%	14.8%	6.6%	16.4%	13.1%
All others	63.6%	20.2%	6.2%	3.1%	3.1%	3.9%
Georgia	73.2%	21.2%		3.1%	2.2%	0.3%
U.S.	73.3%	21.3%		3.0%	2.1%	0.3%

Georgia and U.S. Data Source: 2006 County Business Patterns, U.S. Census Bureau

Half of the businesses (51.1 percent) that responded to the survey represented small businesses employing a total of one to nine people at all of the company's locations. That figure is less than the estimated percentage these businesses represented in all of Georgia (73.2 percent). Thus, compared to state and national averages, survey responses were overrepresented by larger businesses. Participating manufacturers particularly skewed the survey results, with only 24.6 percent reporting fewer than 10 employees.

How many years ago was your company founded?

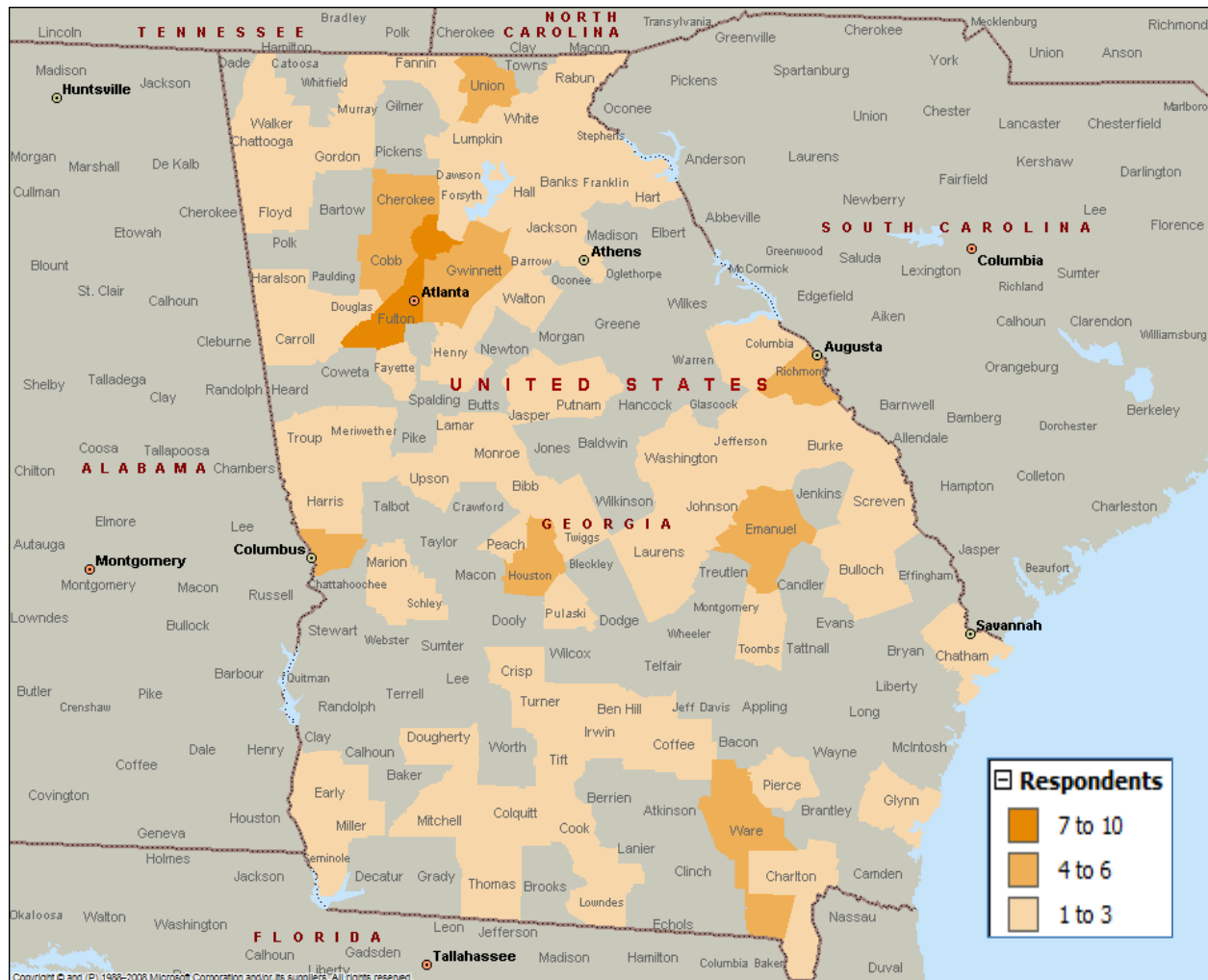
192 respondents



One-third of the companies (33.3 percent) were founded more than 25 years ago and 23.4 percent have been in business between 11 and 25 years. Only 7.3 percent were formed less than two years ago.

What is the Georgia county of the business location you represent?

171 respondents



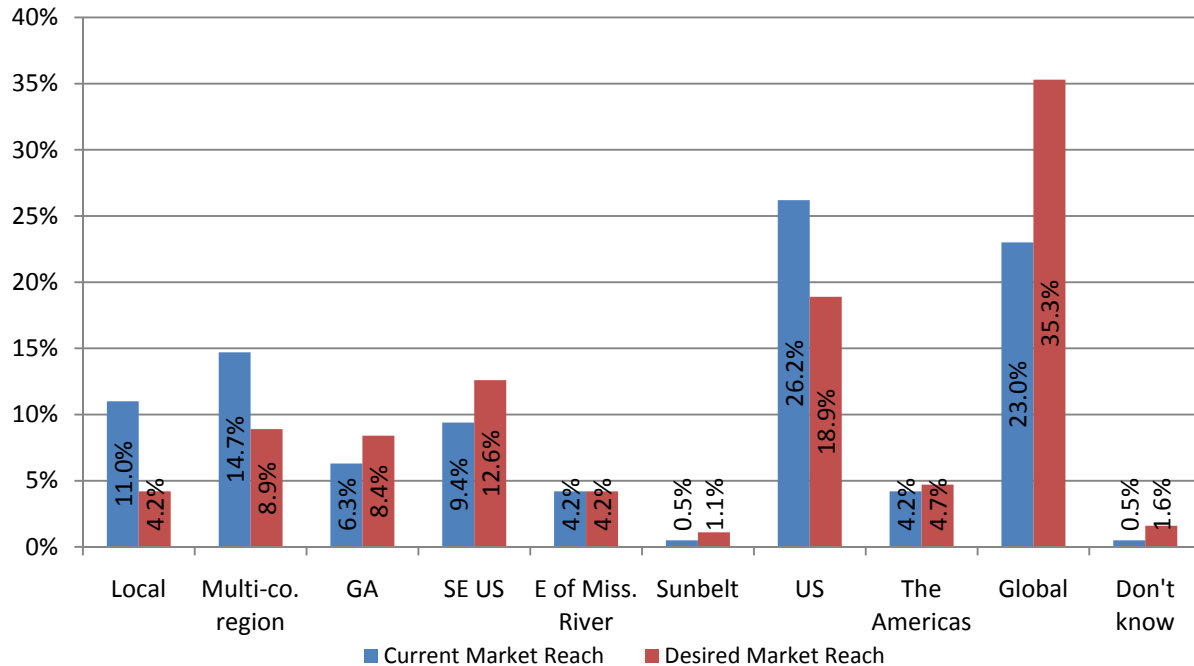
This survey had participation from businesses across the state, representing 81 of the state's 159 counties. The map above shows the location of the survey respondents. Higher concentrations of businesses were located in the Atlanta metropolitan area, as well as in Emanuel, Houston, Muscogee, Richmond, Union, and Ware Counties.

In response to a separate question, 16 respondents indicated that they represented companies headquartered outside Georgia, as shown in the table on the right. Three represented companies headquartered in Ohio, two each in Illinois and Pennsylvania. In addition, one internationally-based company was headquartered in the Netherlands.

State	Businesses
Alabama	1
Arizona	1
Delaware	1
Florida	1
Illinois	2
Iowa	1
Michigan	1
Ohio	3
Pennsylvania	2
South Carolina	1
Virginia	1
Wisconsin	1

What is the current and desired future market reach of the company you represent?

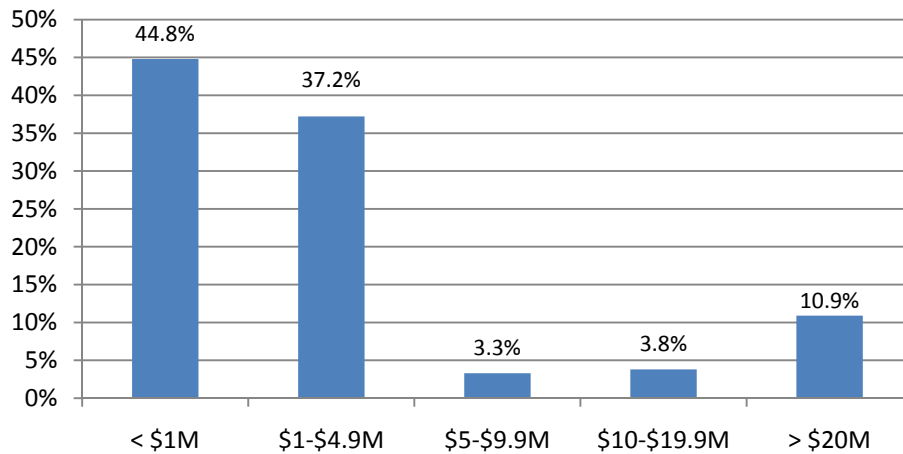
192 respondents



With about one-quarter of the businesses with a current market reach of a multi-county region or smaller, and half with a national or international reach, a wide range of business types were represented. Among manufacturers, only 3.3 percent have a current market reach of a multi-county region or smaller; that percentage is 36.2 percent for all other industries. Most firms seek to expand their reach to the United States or beyond. About one-third desire a market reach no larger than the Southeastern U.S. (18.8 percent among manufacturers and 56.1 among all other sectors). For those that desire a market reach larger than the Southeast, 19.7 percent (or, 24 respondents) currently do not use e-commerce.

What are your company's average annual sales?

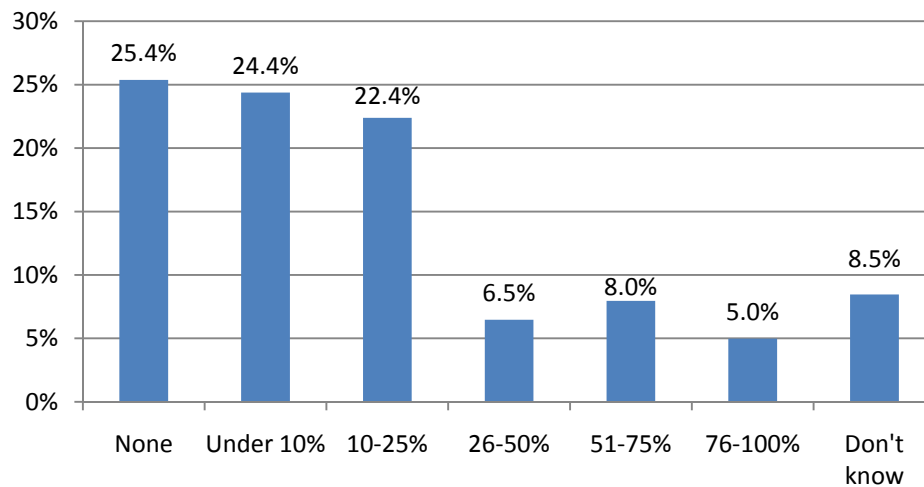
239 respondents



Most respondents, regardless of number of employees or years in business, are small from the perspective of their estimated average annual sales. Not quite half (44.8 percent) of the businesses that responded to the survey have average annual sales under \$1 million (21.0 percent among manufacturers; 53.1 percent among all others industries). Another 37.2 percent of businesses have annual sales between \$1 million and \$4.9 million.

What average amount, in percent, of annual sales can be attributed to e-commerce activities?

202 respondents



Just over one-quarter (25.4 percent) of the businesses reported that none of their annual sales can be attributed to e-commerce activities (19.0 percent among manufacturers; 28.3 percent among all others).

Close to half (49.8 percent) of the respondents said that e-commerce accounts for 25 percent of their sales or less, and 41.9 percent indicated that at least 10 percent of their sales are attributed to e-

commerce. Only 5 percent said that e-commerce makes up between 76 to 100 percent of their annual sales (3.4 percent among manufacturers; 5.5 percent among all others). In comparison, 14.0 percent of the total value of U.S. shipments and sales can be attributed to e-commerce.¹⁶ Businesses reported that the most common means of defining their e-commerce sales is from tracking orders placed online or via e-mail. Others stated their estimate was based on a reasonable guess. A few said they based their answer on new customers who indicated they learned about the company from a Web site or e-mail communication.

Which of the following job titles best describes your role in the company?

182 respondents

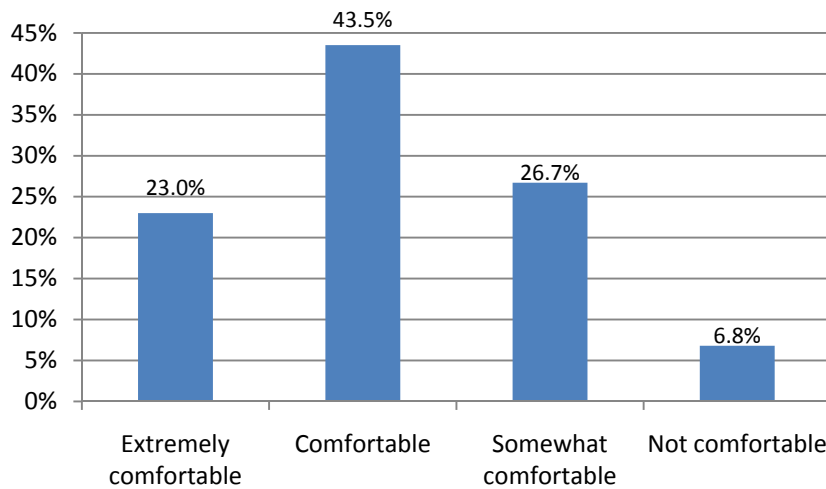
61.5 percent	President/CEO
18.7 percent	Senior Management
8.2 percent	Sales Manager
8.2 percent	Operations Manager
7.1 percent	Other
2.2 percent	IT Manager
1.1 percent	HR Manager
0.5 percent	Board of Directors

The majority of respondents were those persons most knowledgeable about the company's e-commerce activities, assuming that the president/CEO or senior management would be so. Most respondents were the president/CEO of their company (61.5 percent), and about one-fifth were in senior management positions (18.7 percent).

¹⁶ U.S. Census Bureau (2008). *E-Stats Report*. <http://www.census.gov/eos/www/2006/2006reportfinal.pdf>.

How comfortable do you feel using the latest information and communications technologies?

191 respondents



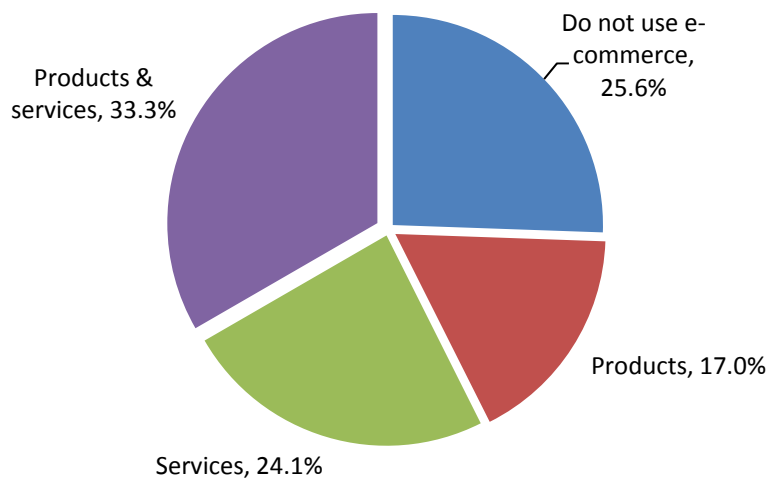
The majority of respondents reported that they were comfortable or extremely comfortable using the latest information and communications technologies (66.5 percent). Thus, it is probably reasonable to assume most respondents generally understood terminology and concepts used in the survey.

SURVEY FINDINGS

An overwhelming majority of responding businesses had a company Web site (91.1 percent), indicating that most have made this first step toward e-commerce. This section highlights findings that address the extent to which participating companies currently use e-commerce, and their primary needs related to expanding their e-commerce market reach.

Do you primarily use e-commerce opportunities to advance the sale of your services and/or products, or would you say that you do not use e-commerce?

270 respondents

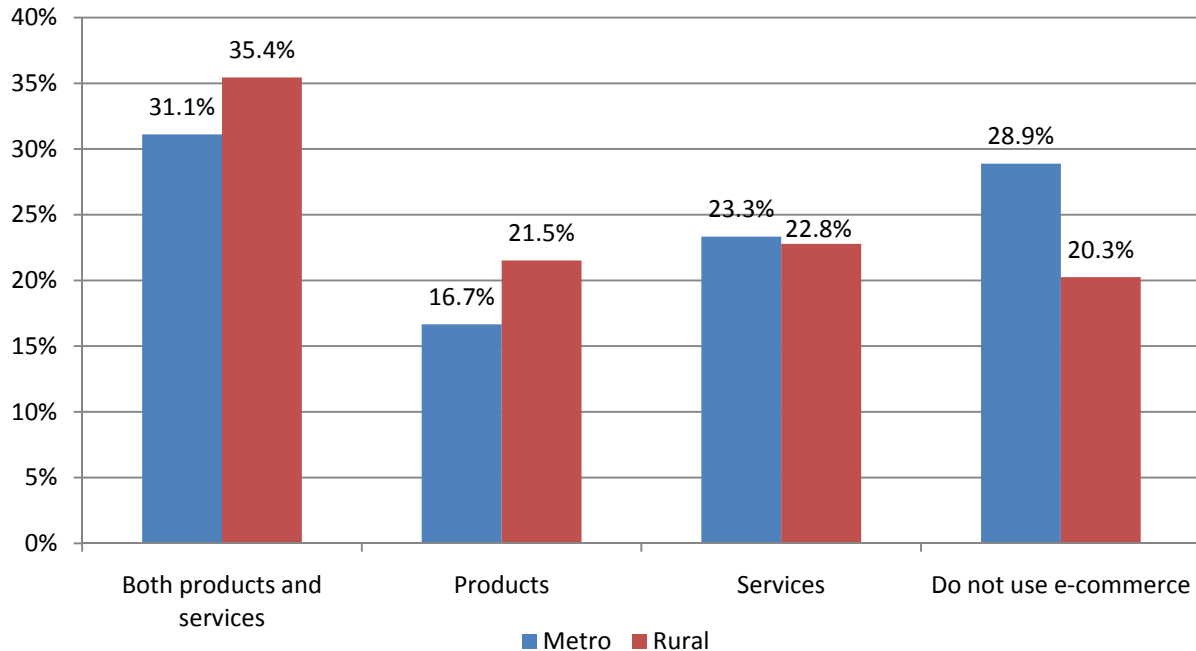


Approximately 25 percent of businesses said they do not use any form of e-commerce (roughly the same percentage that reported no sales attributable to e-commerce¹⁷), while 33.3 percent of businesses use it to sell both products and services. Forty percent sell only products or services.

¹⁷ Of those who reported that they do not use e-commerce, 21.7 percent indicated in the previously reported question that under 10 percent of their annual sales can be attributed to e-commerce activities; 5.8 percent said that 10 to 25 percent of their sales can be thus attributed. The reason for this apparent contradiction is unknown. The remaining percent of those who do not use e-commerce answered none or don't know, or they did not respond to the question.

Metro and Rural Areas: Do you primarily use e-commerce opportunities to advance the sale of your services and/or products, or would you say that you do not use e-commerce?

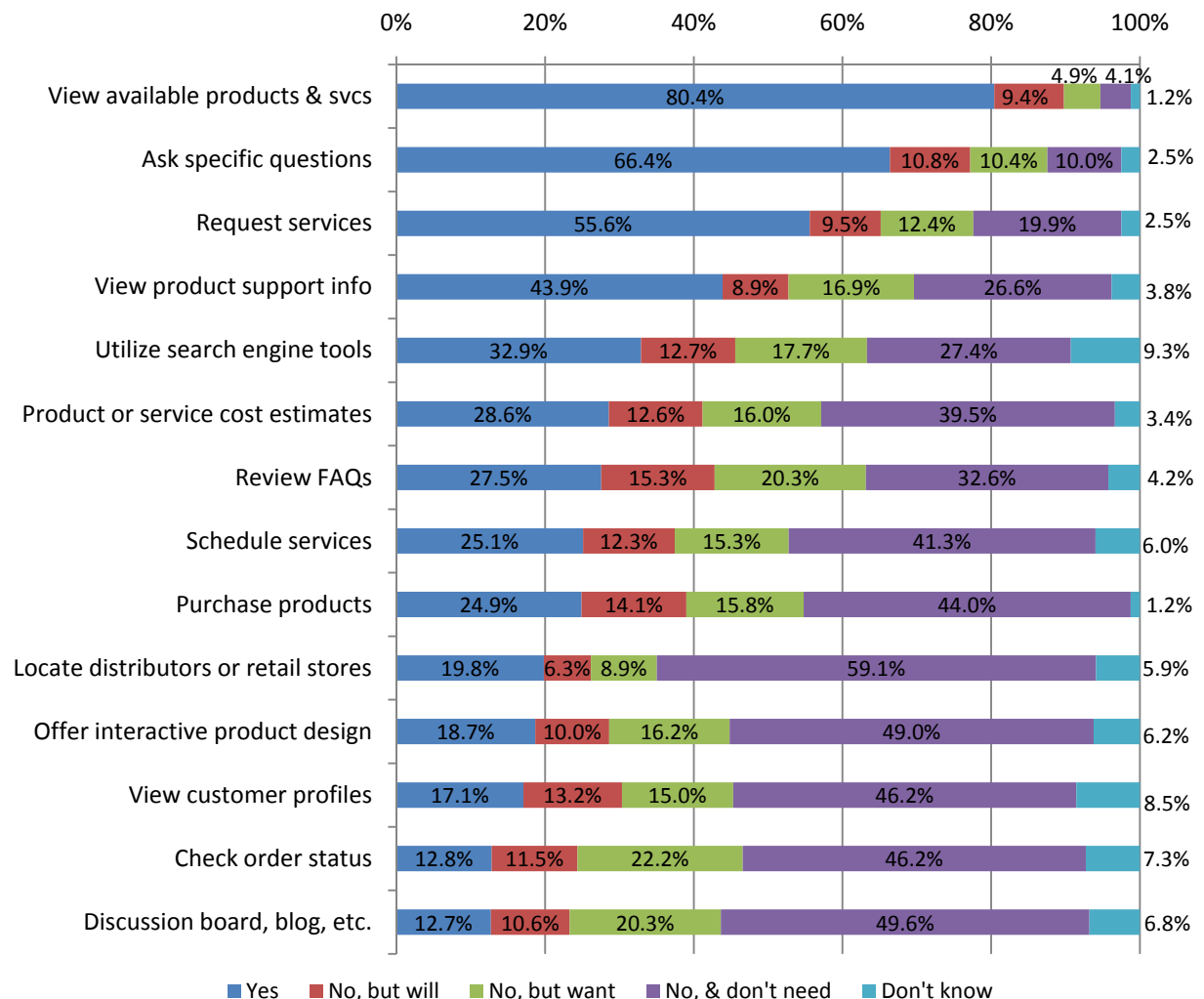
169 respondents



More metro area businesses indicated they do not use e-commerce (28.9 percent) than rural businesses (20.3 percent). Close to one-third of all metro and rural area businesses responded that they use e-commerce for both products and services (31.1 and 35.4 percent, respectively). While more rural area respondents (21.5 percent) use e-commerce to sell products than metro area respondents (16.7 percent), slightly more metro area respondents used e-commerce for services (23.3 percent) compared to rural respondents (22.8 percent).

Does your company's Web site allow users to do the following online?

245 respondents



By far, the most common service provided online is an online catalog, which allows customers to view available products and services on business Web sites. Eighty percent of respondents stated that their businesses already offered this service and another 9.4 percent of businesses plan to do so in the future.

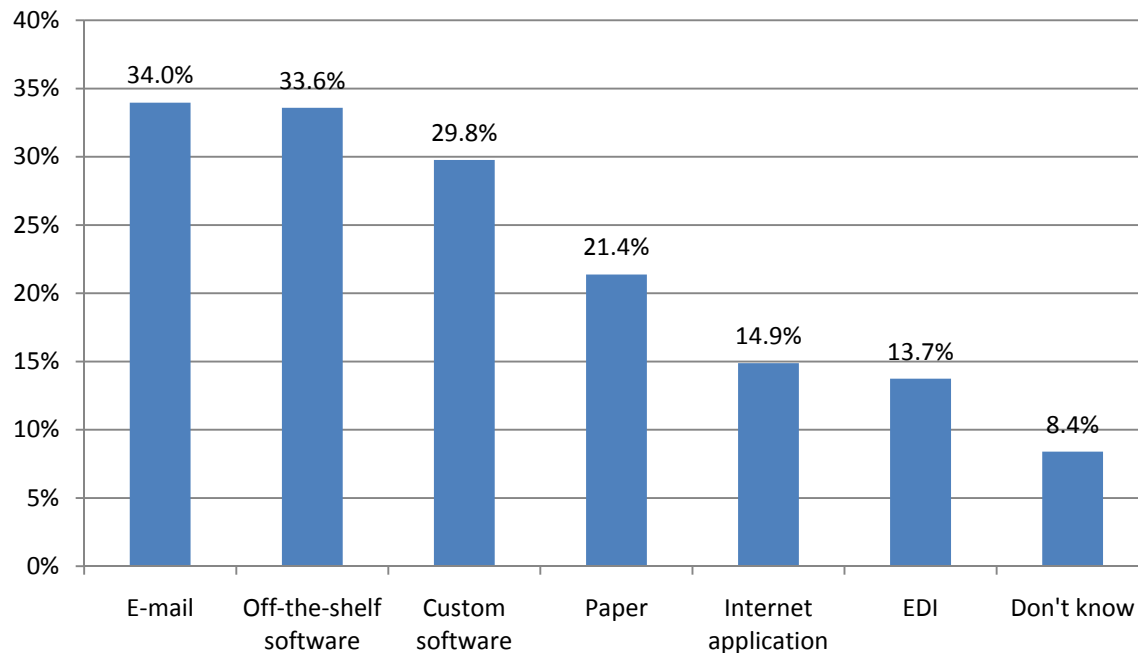
Those items where it is likely respondents may be in greatest need of assistance, or desiring of additional information, are those with the most "No, but want" responses. The top five items in this response category were:

- (1) Check order status (22.2 percent)
- (2) Discussion board, blog, etc. (20.3 percent)
- (3) Review FAQs (20.3 percent)
- (4) Utilize search engine optimization tools (17.7 percent)
- (5) View product support information (16.9 percent)

In the open-ended "other" Web site elements response section, referenced items included product videos and client testimonials.

How does your company track distributor/customer transactions?¹⁸

262 respondents



The most common methods of tracking distributor and customer transactions were via e-mail (34.0 percent) and off-the-shelf software (33.6 percent).

Almost 30 percent of businesses had custom-designed software and 21.4 percent reported using paper to track transactions. Only 13.7 percent used Electronic Data Interchange (EDI), which refers to electronic transmission of data between computers without human interaction.

The few responses received in the “other” answer category included telephone and personal contact.

If you indicated you use a software or Internet-based application, please share the product name of the application you use.

108 responded

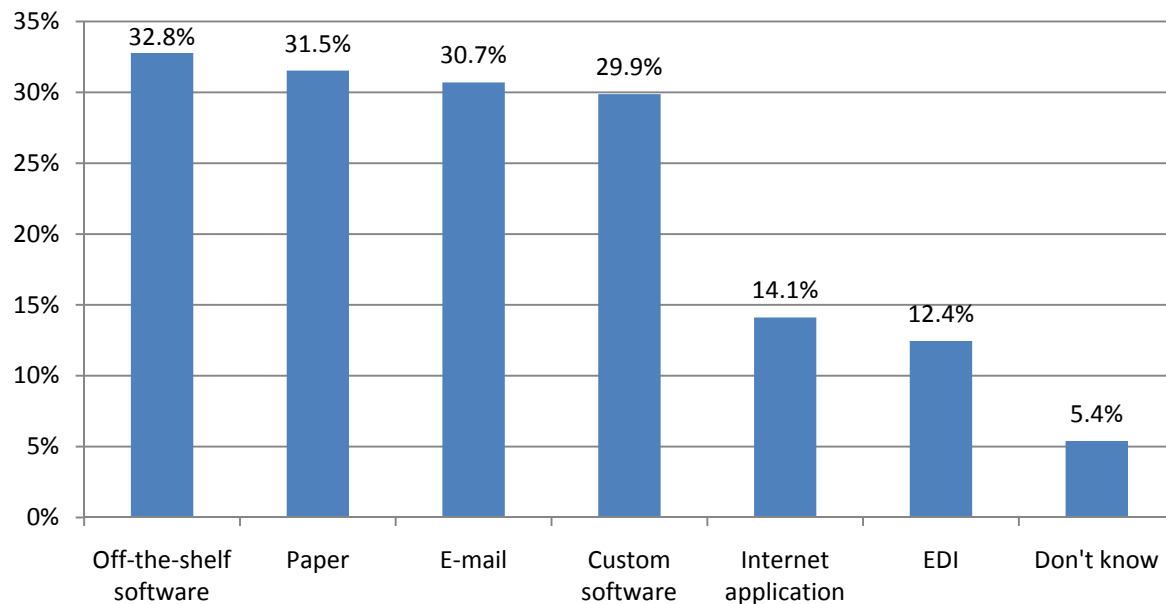
QuickBooks is by far the most common off-the-shelf software that respondents used, although many other products were also reported. Several businesses responded that they used a version of Sage MAS software, Peachtree Accounting software, or Microsoft Office. The products multiple respondents reported using are listed below. In addition, respondents identified 59 other programs that they use.

¹⁸ The data in this chart do not sum to 100 percent because, as a “select all that apply” question, each item represents the percentage of participants who checked this particular option.

- Some version of Quickbooks/Quicken 37
- Microsoft Office 8
- Some version of Sage MAS 5
- Some version of Peachtree Accounting 4
- Salesforce 3

How does your company track, control, or coordinate the flow of shipments of goods or services?¹⁹

241 respondents



Off-the-shelf software, paper, e-mail, and custom software are almost equally popular methods of tracking, controlling, and coordinating the flow of goods and services. Between 29 percent and 33 percent of respondents indicated that they use one or more of these methods.

If you indicated you use a software or Internet-based application, please share the product name of the application you use.

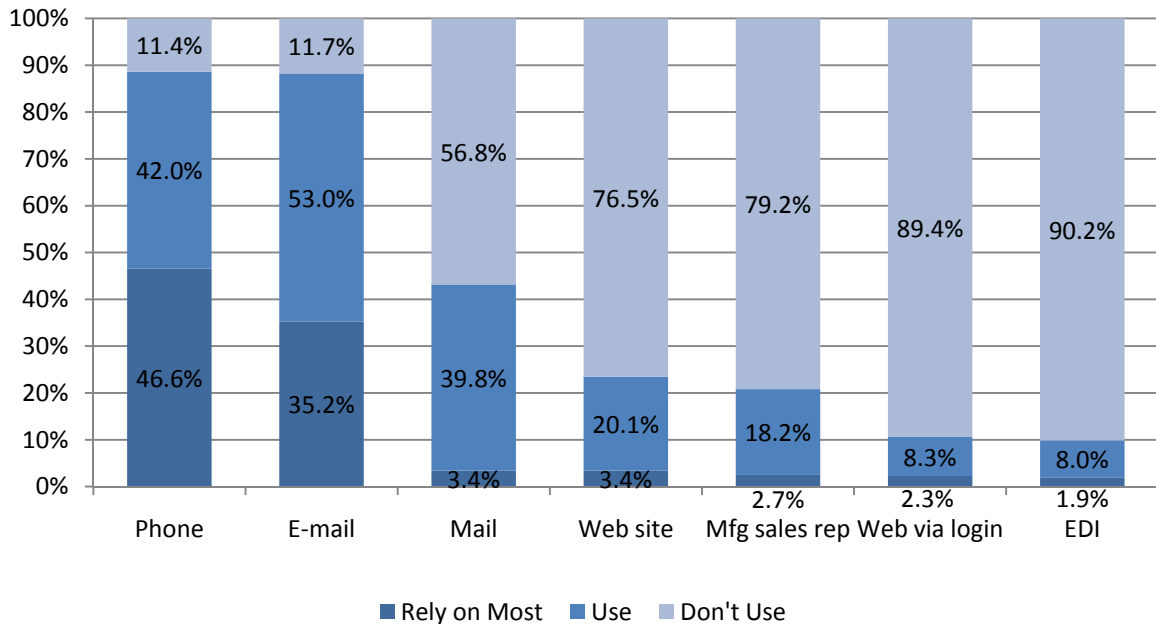
89 responded

Many of the software products used to track distribution and customer transactions are also used to coordinate the flow of shipments. QuickBooks is still the most popular software for these operations, but standard mailing companies such as FedEx, UPS, and the United States Postal Service (USPS) are also common. The software packages that are used by multiple respondents are listed below. In addition, respondents identified 43 other programs used to track shipments.

¹⁹ The data in this chart do not sum to 100 percent because, as a “select all that apply” question, each item represents the percentage of participants who checked this particular option.

- Some version of QuickBooks/Quicken 25
- Microsoft Office 8
- FedEx/UPS/USPS Tracking 7
- Custom-designed or in-house 4
- Some version of Sage MAS 4
- Some version of Peachtree software 3

Which of the distributor/customer communication forms do you use?²⁰ 264 respondents



Nearly 90 percent of respondents continue to use the phone as a means of communicating with distributors and customers, illustrating that even in this electronic age, many people continue to appreciate the more personal contact of the telephone. About half (46.6 percent) of respondents consider the phone their primary means of communication with distributors or customers.

Thirty-five percent (35.2 percent) of respondents reported relying on e-mail as their primary method of communication with distributors and customers - and another 53 percent reported using it, making it the second most frequently used form of communication reported by the businesses.

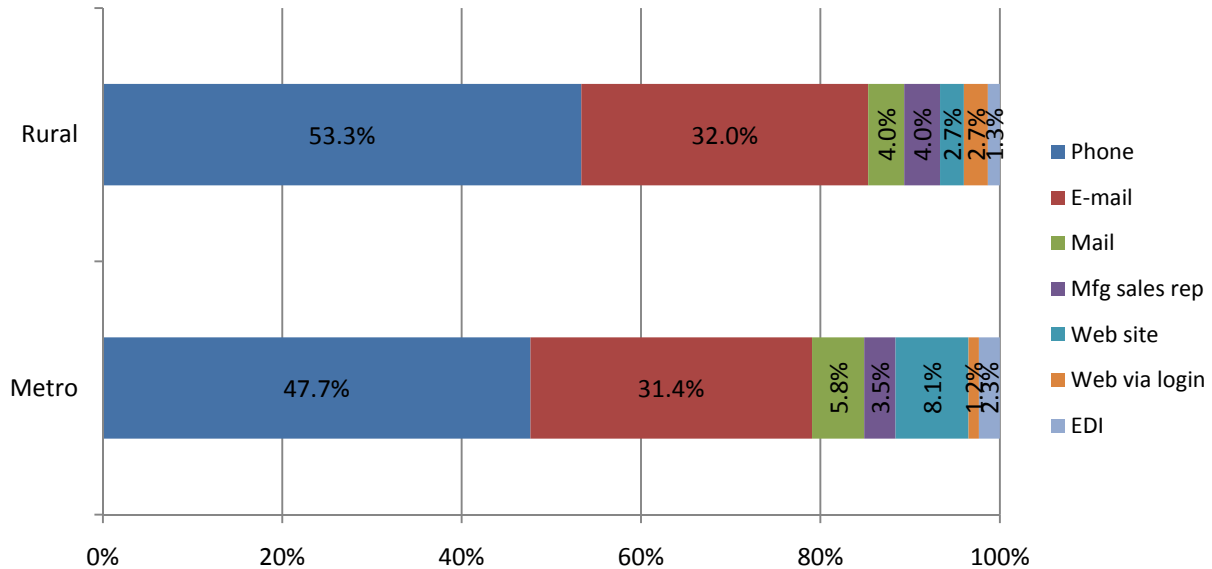
Forty-three percent use USPS mail for at least part of their communications. More than 20 percent use a Web site or manufacturing sales representative to communicate with distributors or customers. EDI is used the least (by 9.8 percent).

Of the open-ended "other" responses, fax transmission was the most common response. Some businesses regard face-to-face interactions as the most important form of communication with their customers. Three respondents said they publish a newsletter as a means of communicating with customers.

²⁰ This chart divides responses into those who responded that this was the item they most used/relied upon, those who responded that they use the item (but did not also reference it as the one they most used/relied upon), and those who did indicate that they use that item.

Metro and Rural Areas: Which of the distributor/customer communication forms do you rely on most?

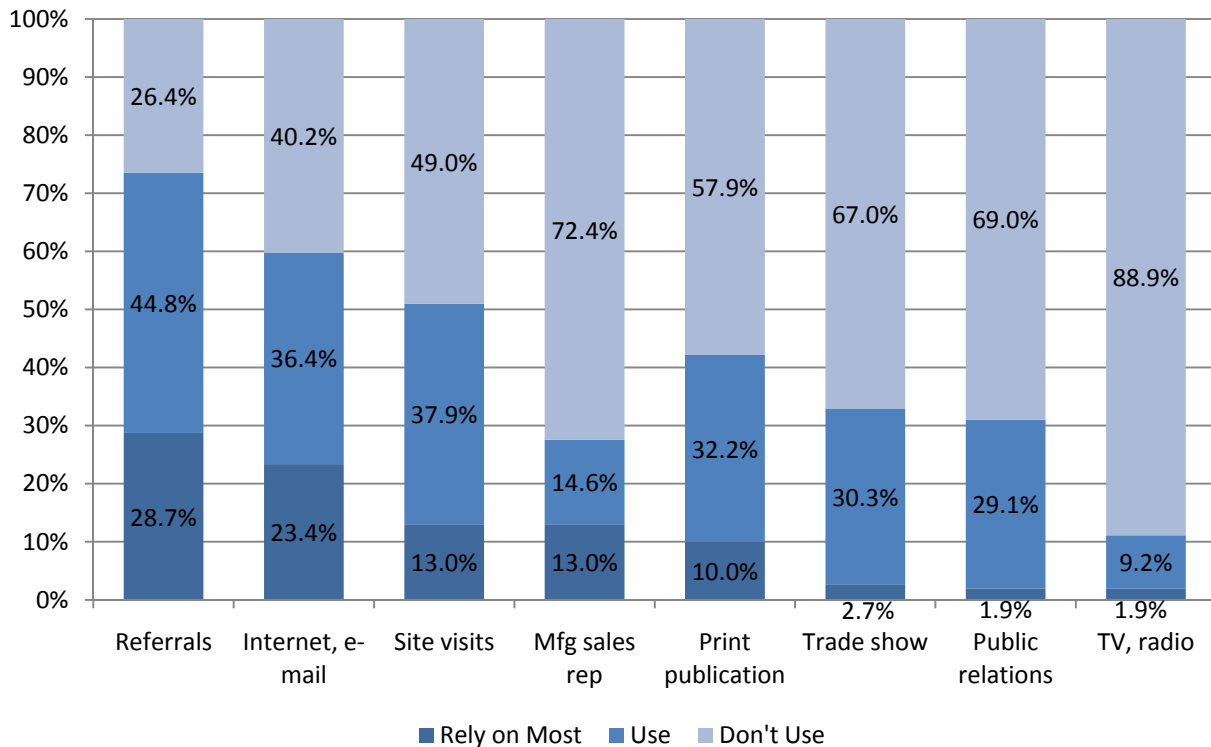
161 respondents



There did not appear to be significant difference in the primary means of communication for rural versus metro businesses. Close to half of businesses in both metropolitan and rural areas use the telephone as their primary means of communicating with distributors and customers (47.7 percent and 53.3 percent, respectively). E-mail is the second most common means of communication among both metropolitan (31.4 percent) and rural (32.0 percent) area businesses. More metro area businesses used a Web site (8.1 percent) compared to rural businesses (2.7 percent).

Which of the advertising/marketing methods do you use?²¹

261 respondents



Although 91.1 percent of survey respondents indicated that their company has a Web site, as many as 40.2 percent of respondents to this question did not indicate that the Internet was one of their advertising mechanisms. Of the 236 businesses who answered the above question and have a Web site, 36.9 percent (87 businesses) did not indicate that the Internet/e-mail was one of their means of advertising. Yet, about one-in-four businesses (23.4 percent) identified the Internet or e-mail as their primary means of advertising (only five businesses responded that they do not have a Web site, and Internet/e-mail is a means of advertising that they use).

Referrals are the most commonly used method of advertising (73.6 percent), with 28.7 percent of businesses relying on them as their primary approach. Clearly, word-of-mouth continues to be considered a valued means of expanding business opportunities. Only 10.0 percent primarily rely on print media, such as newspapers, magazines and/or trade association publications as their primary method of marketing, although an additional 32.2 percent use these media forms as part of their advertising approach. Half of the respondents use on-site visits, but only 13.0 percent consider that their primary method of advertising. Likewise, 13.0 percent mostly depend on a manufacturing sales representative, with an additional 14.6 percent using their services in some manner.

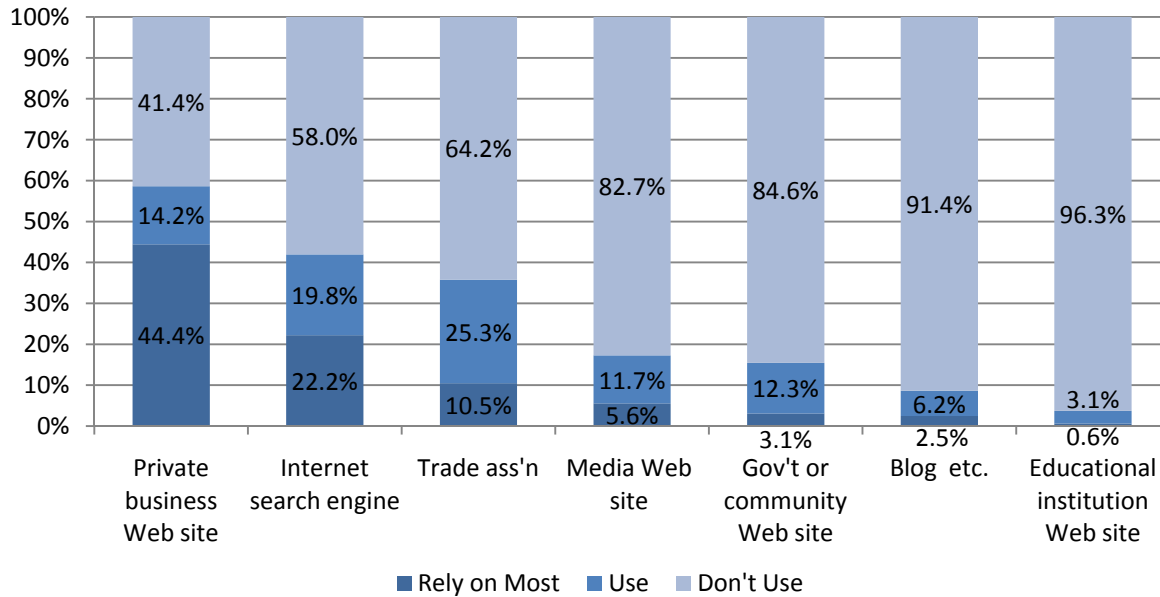
Less popular marketing methods include trade shows, public relations work, and broadcast communications such as TV or radio. This may be partially due to businesses perceiving the potential rewards of such methods as insufficient to outweigh the expense.

²¹ This chart divides responses into those who responded that this was the item they most used/relied upon, those who responded that they use the item (but did not also reference it as the one they most used/relied upon), and those who did indicate that they use that item.

The open-ended responses to the “other” category indicate that direct mailings and the phonebook yellow pages were additional marketing methods used. A few businesses mentioned that they cold-call potential customers, or make presentations to various groups to advertise their products and services.

If your company uses the Internet to advertise, on what type of Web site does your company dedicate its online advertising?²²

162 responded



Of these respondents who use the Internet to advertise, 58.6 percent said they advertise on a private business Web site, including 44.4 percent of which indicated they primarily rely on this method of promoting their products and services. The large portion of those who use a private business Web site, who also consider it the source they rely on the most, suggests that many businesses have found this to be a worthwhile online advertising approach.

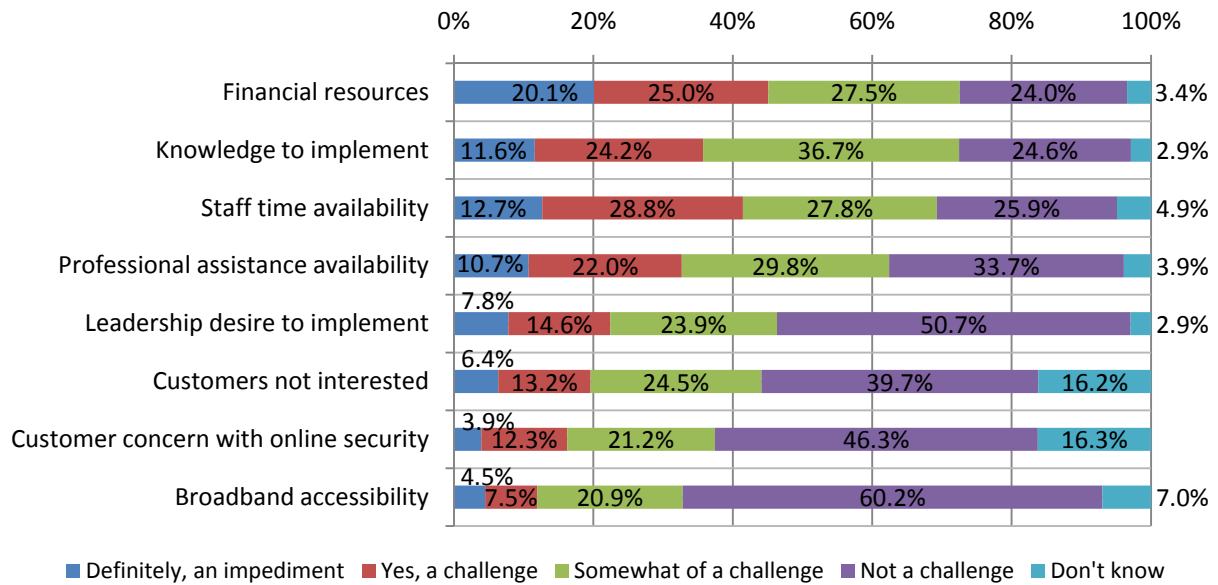
Forty percent use an Internet search engine (e.g., Google, Yahoo) to advertise their products, with 22.2 percent indicating they rely on this method the most. More than one-third (35.8 percent) used trade association, business association, or chamber of commerce Web sites to advertise, although only 10.5 percent considered it their primary marketing method.

Less popular advertising methods include media, government, community, or educational institution Web sites. Less than 9 percent use blogs or online bulletin boards.

²² This chart divides responses into those who responded that this was the item they most used/relied upon, those who responded that they use the item (but did not also reference it as the one they most used/relied upon), and those who did indicate that they use that item.

How would you rate the extent to which the following have been a challenge to your company in realizing its full e-commerce potential?

207 respondents



Financial resources present the greatest hurdle to businesses in reaching their full e-commerce potential, with one in five reporting that it poses an impediment; an additional 52.5 percent identified it as a challenge (i.e. responded "Yes, a challenge" or "Somewhat of a challenge"). Staff knowledge to implement, and availability of time to do so, present similar difficulties for businesses, with 72.5 percent and 69.3 percent, respectively, identifying these areas as impediments or challenges. As expressed by one business, "I have been wanting a Web site for years now, but have lacked the capital to hire someone and lacked the ability to do it myself. I would love to create the Web site myself, but really need recommendations of who to use for a 'host,' etc."

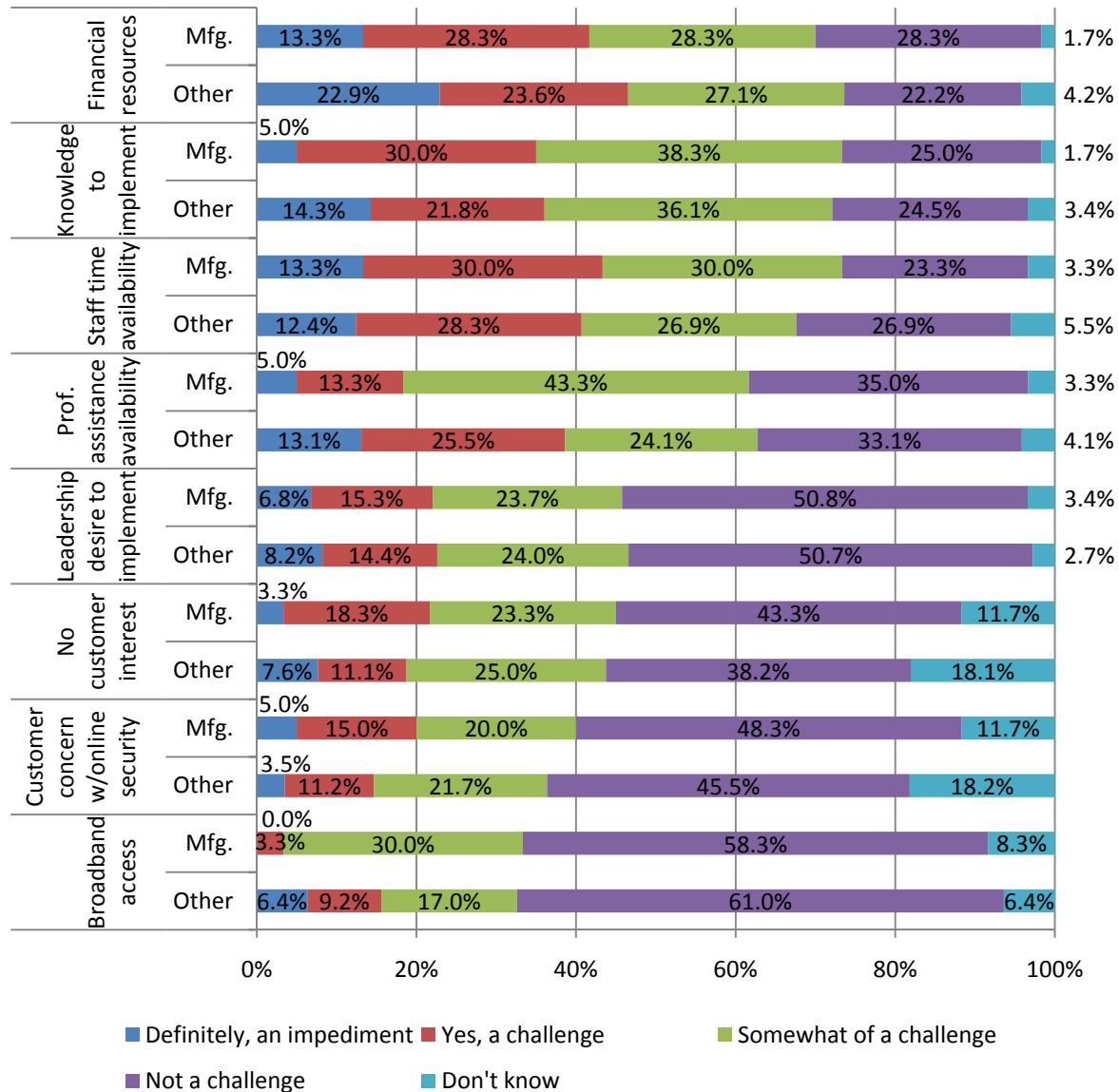
Regarding the availability of professional assistance, 62.4 percent of businesses identified it as an impediment or challenge. And, 46.3 percent referenced their businesses' leadership desire to implement e-commerce initiatives as an impediment or challenge.

At the same time, 16.2 percent said they did not know whether there was customer interest in e-commerce. A similar percentage (16.3) said they did not know whether customer concern with online security is a detriment. This data suggests a potential opportunity for businesses to conduct some market research of their customers' interests and concerns regarding online business transactions.

Manufacturing vs. All Other Industries: How would you rate the extent to which the following have been a challenge to your company in realizing its full e-commerce potential?

60 Manufacturers

144 All Other Industries



Manufacturers felt that their greatest obstacle to implementing e-commerce activities was both the staff knowledge and availability of staff time to implement (for both items, 73.3 percent responded “definitely, an impediment,” “yes, a challenge,” or “somewhat of a challenge”). All other industries identified availability of financial resources as their greatest impediment or challenge (73.6 percent).

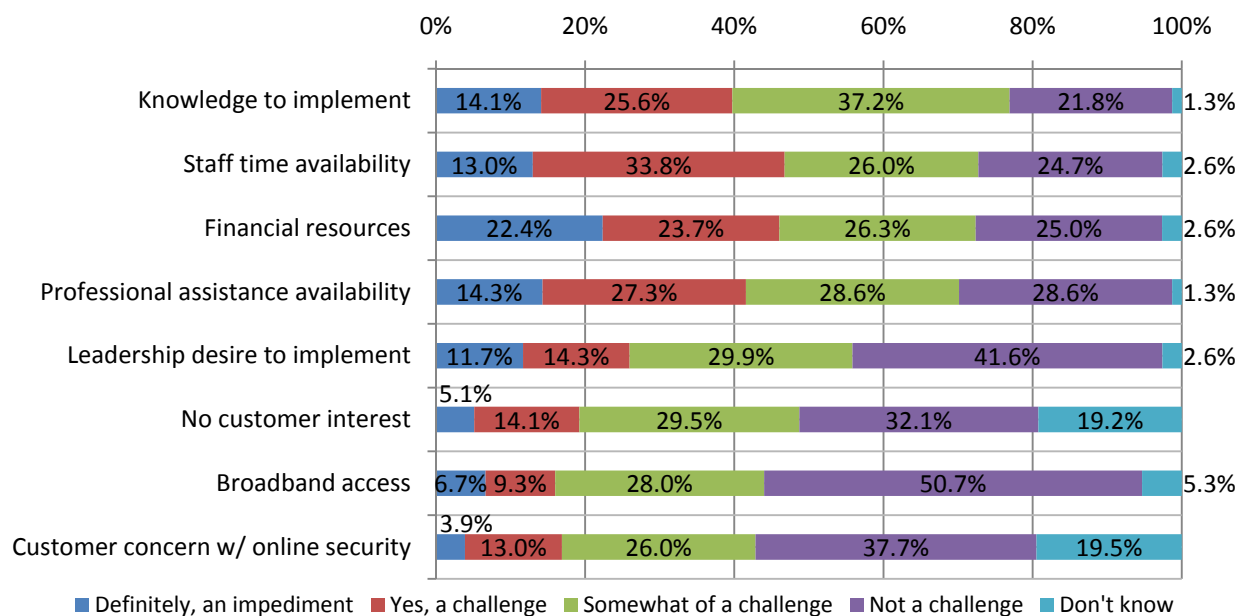
Staff knowledge to implement (73.3 percent for manufacturers, 72.1 percent for all other industries), availability of staff time (73.3 percent for manufacturers, 67.6 percent for all other industries), customers not interested in making transactions electronically (45.0 percent for manufacturers, 43.8 percent for all other industries), customer concern with online security (40.0 percent for

manufacturers; 36.4 percent for all other industries), and access to broadband (33.3 percent for manufacturers, 32.6 percent for all other industries) were the items for which a greater percentage of manufacturers perceived an impediment or challenge to growth than for all other industries.

For the other potential challenges, other industries perceived these as greater hurdles to their e-commerce plans than did manufacturers. This was true of financial resources (73.6 percent for all industries, 70.0 percent for manufacturers), availability of professional technical advice/guidance/coaching (62.8 percent for all other industries, 61.7 percent for manufacturers) and leadership desire to implement (46.6 percent of all other industries, 45.8 percent for manufacturers).

Rural Areas: How would you rate the extent to which the following have been a challenge to your company in realizing its full e-commerce potential?

78 respondents



Rural businesses found staff knowledge to implement to be the greatest challenge to e-commerce activities, with 76.9 percent noting it as an impediment or a challenge (includes "Definitely, an impediment," "Yes a challenge," and "Somewhat of a challenge" responses), compared to 72.5 percent of all businesses. Rural businesses next found the availability of staff time to be the greatest challenge (72.7 percent of rural businesses found it an impediment or a challenge, versus 69.3 percent of all businesses).

The only area for which a larger portion of all businesses identified it as an impediment or challenge than rural areas did was availability of financial resources (72.4 percent of rural businesses and 72.5 percent of all businesses found the area of financial resources to be an impediment or a challenge).

Broadband access in rural areas has been identified in previous studies as an impediment to e-commerce,²³ and here, 44.0 percent of rural businesses considered it an impediment or challenge to

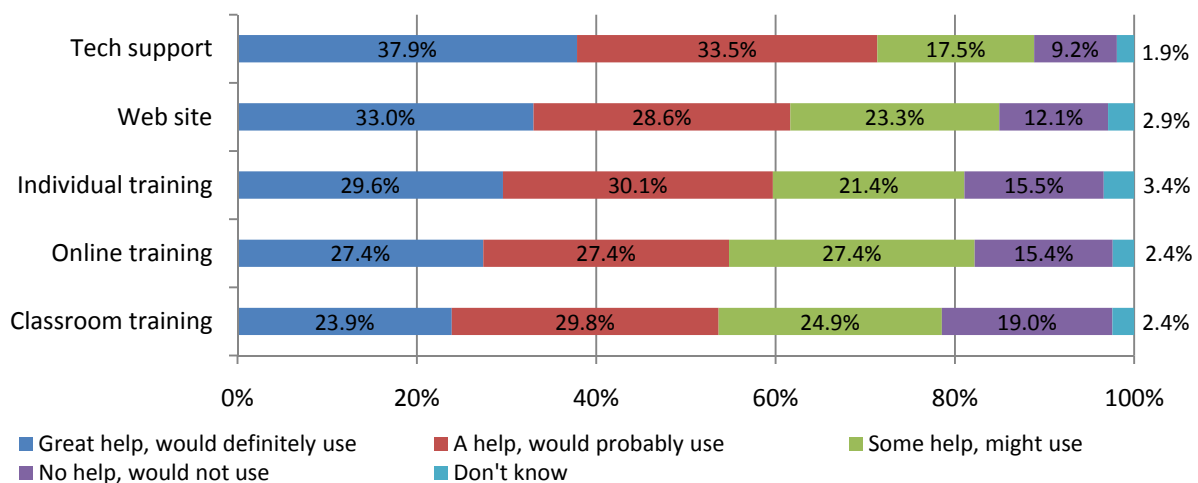
²³ LaRose, R. et al (2007). "Closing the rural broadband gap: Promoting adoption of the Internet in Rural America." *Telecommunications Policy*, 31, p. 359-373.

their implementation of e-commerce (versus 32.8 percent of all businesses). Several comments were expressed by businesses that provide additional insight regarding broadband access in rural Georgia:

- “Rural broadband is an issue. We have broadband on-site, but at home I can only get broadband via a satellite. This is better than dial-up, but still slow.”
- “Broadband access is needed for homes in this rural area as dial-up service is far too slow to conduct any business from my home.”
- “Lack of high-speed Internet availability is largest problem we have in Southwest Georgia.”

Assuming cost is not a concern, how would you rate the extent to which the following would help your company realize its full e-commerce potential?

208 respondents

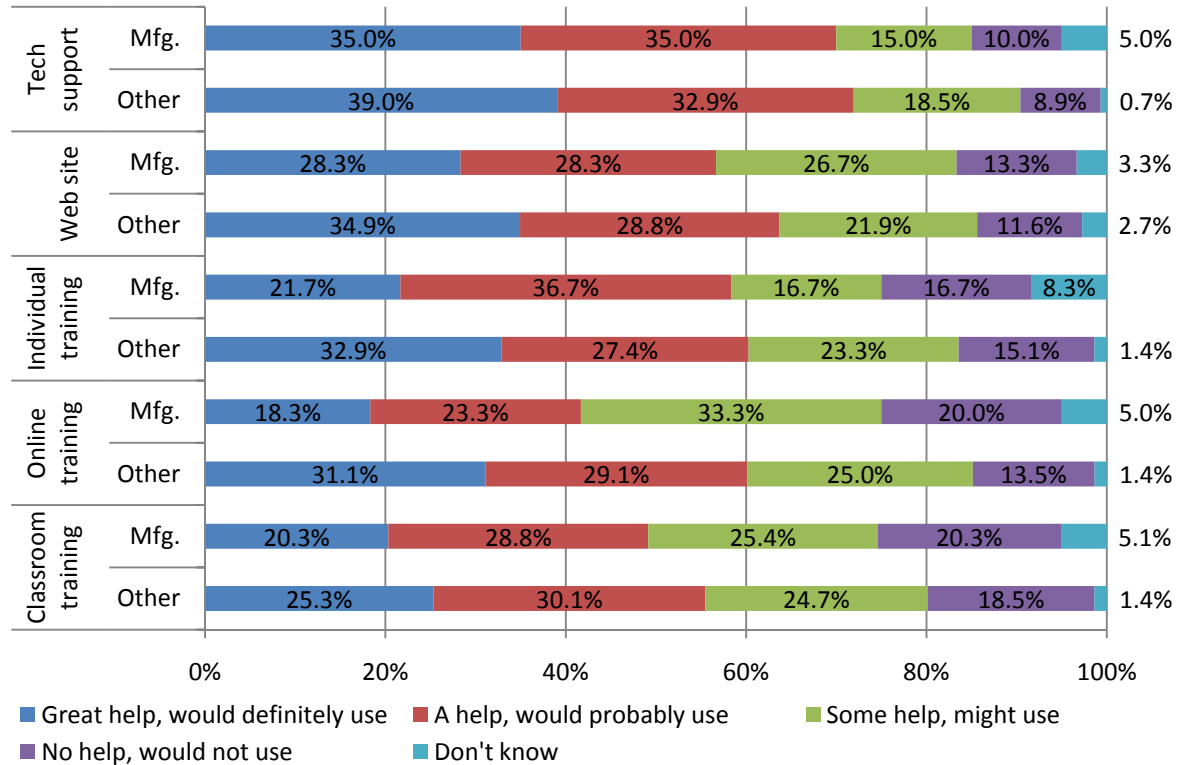


A majority of businesses said that they would likely utilize various resources if those were available to help their companies reach their full e-commerce potential. Professional technical support and guidance was the most popular, with 71.4 percent of respondents answering that they would “definitely” or “probably” use it. Sixty-two percent said they would definitely or probably use a Web site with advice, Frequently Asked Questions (FAQs), and other implementation assistance information. “Individual, in-person training or coaching services” (59.7 percent) was slightly more popular than “In-person, classroom-based training program” or “online training,” which had 53.7 and 54.8 percent support, respectively (with the definition of “support” being those who responded “great help, would definitely use” or “a help, would probably use”).

Manufacturing vs. All Other Industries: Assuming cost is not a concern, how would you rate the extent to which the following would help your company realize its full e-commerce potential?

60 Manufacturers

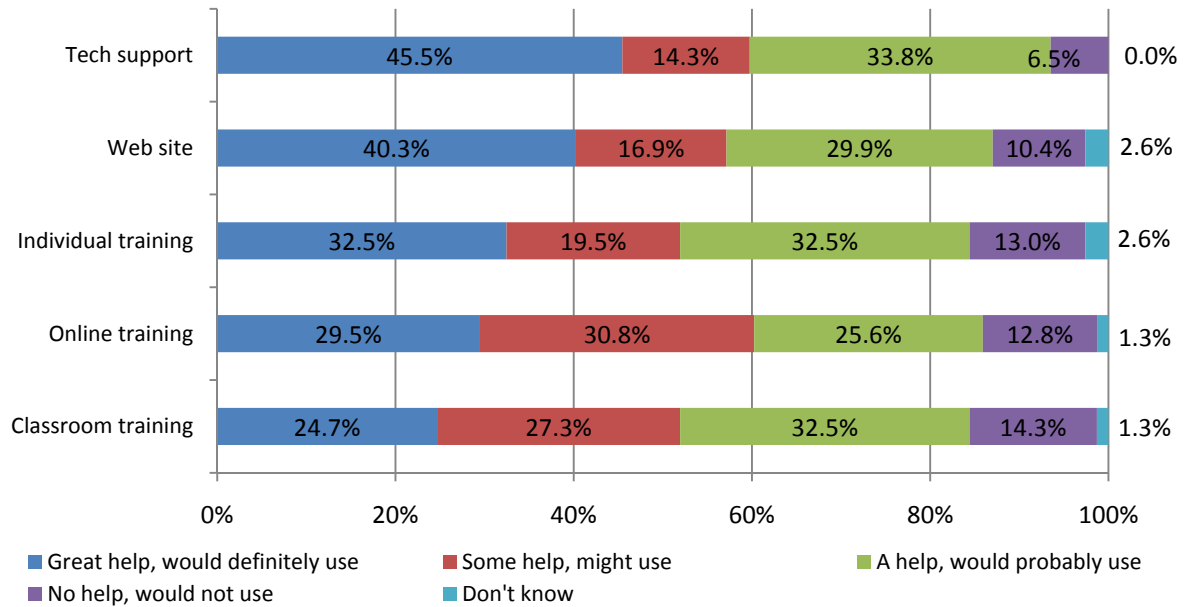
146 All Other Industries



Both manufacturers and all other industries found professional technical advice/guidance/support to be the greatest source of potential help, if cost is not a concern (35.0 percent and 39.0 percent, respectively). In every instance, a larger percentage of all other industries identified it as a “great help, would definitely use” or “a help, would probably use” than manufacturers did. The greatest disparity was for online training; while 60.1 percent of all other industries said they would “definitely” or “probably” use an e-commerce online training program, only 41.7 percent of manufacturers responded likewise.

Rural Areas: Assuming cost is not a concern, how would you rate the extent to which the following would help your company realize its full e-commerce potential?

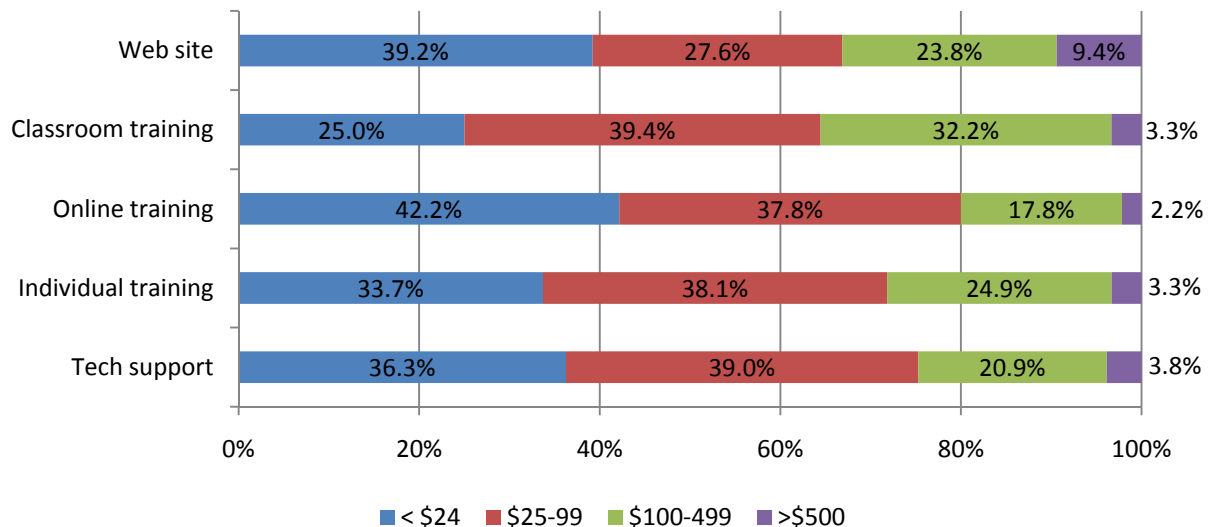
78 respondents



In every proposed assistance area, a greater percentage of rural versus metro businesses said the training/support would be a “great help.” The percentages particularly varied in the areas of technical support (37.9 percent for all respondents and 45.5 percent for rural area respondents) and a Web site resource (33.0 percent and 40.3 percent, respectively).

What would be the maximum amount you would be willing to pay for a high-quality program of each of the following type?

208 respondents



Each item in the above question had a different scale attached to it, making it difficult to compare the willingness to pay for one option to another. For example, based on the percentage of respondents who indicated a willingness to pay over \$500, it appears that businesses place the highest value on a Web site resource. But, this cost would be for an annual membership, compared to the other options for which the question specifically asked about willingness to pay on a participant or per-hour-of-service-provided basis. Yet, with almost one in 10 respondents (9.4 percent) indicating a willingness to pay more than \$500 for a Web site providing quality information relating to how to expand e-commerce opportunities, one could well conclude that businesses place a high value on this type of resource.

As one might expect, businesses expressed a higher willingness to pay for an in-person, classroom-based learning opportunity than a Web-based, online training program (both of which were asked on a per-participant basis). With 35.5 percent willing to pay \$100 to \$499 per person for classroom instruction compared to 20.0 percent for a Web-based course, the difference is significant enough to suggest that businesses place a higher dollar value on in-person over online learning experiences. One business commented that the value of an online program improves if it is conducted as a multi-student, virtual-classroom type of experience.

The survey showed no significant difference between the willingness to pay, on a per-hour-of-service-provided basis, for individual, in-person training compared to professional technical support services.

Although a textbook or other reference guide was not presented in the question, an illustrative comment regarding these types of resources (which could be a component of the Web site resource) was provided by one business. In the respondent's words:

"We can't find a book with useful 'how to' instructions; everything in print is either too general and useless or too specialized and detailed. We need a bridge from the simple beginners' books to the details of 'Here's how to do it.' On most projects and problems, by the time we have figured out how to ask the question and who to ask it of, we usually have solved our problem."

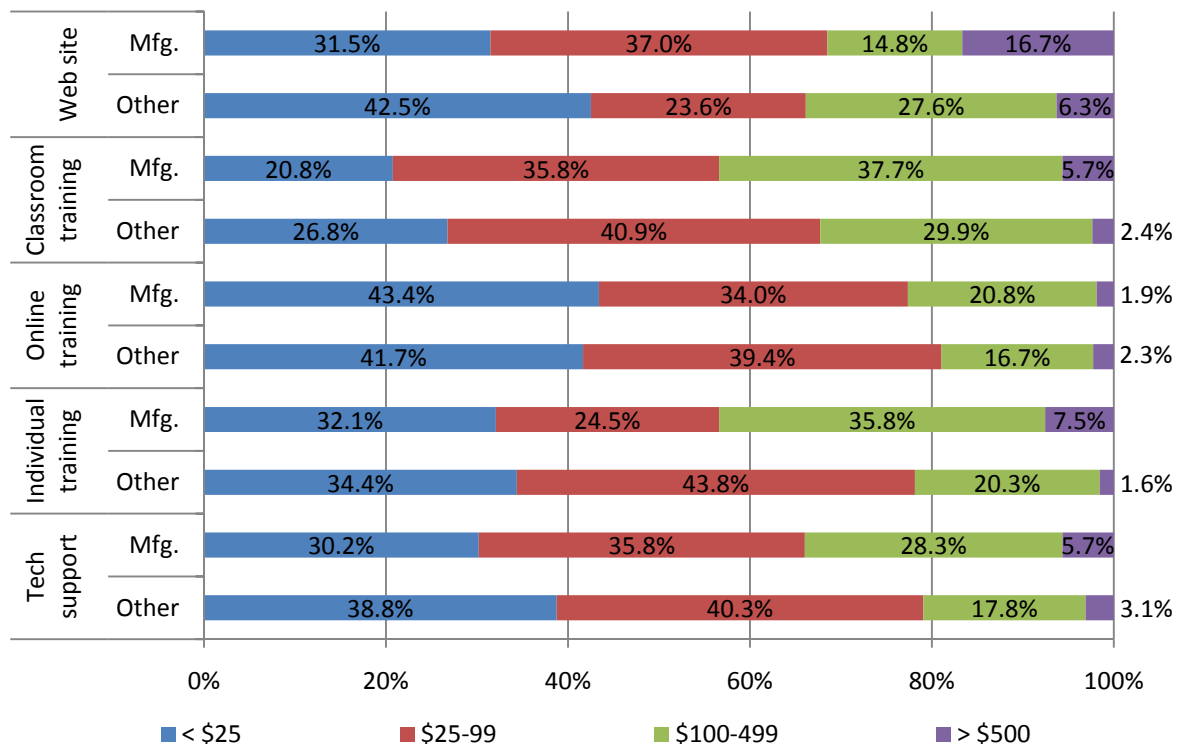
Respondents also voiced frustrations regarding the quality of available technical support. As expressed by one participant:

"There are many areas where we would make changes, and in some of them we have or can acquire the technical expertise. But it is frustratingly difficult to find someone to advise or guide us on an overall project, to help us 'connect the dots.' Perhaps a better way to express this is to say that there are a lot of specialists available to us, and some of them seem quite competent, but we need an interpreter to help the specialists talk to each other."

Manufacturers vs. All Others: What would be the maximum amount you would be willing to pay for a high-quality program of each of the following type:

53 Manufacturers

129 All Other Industries



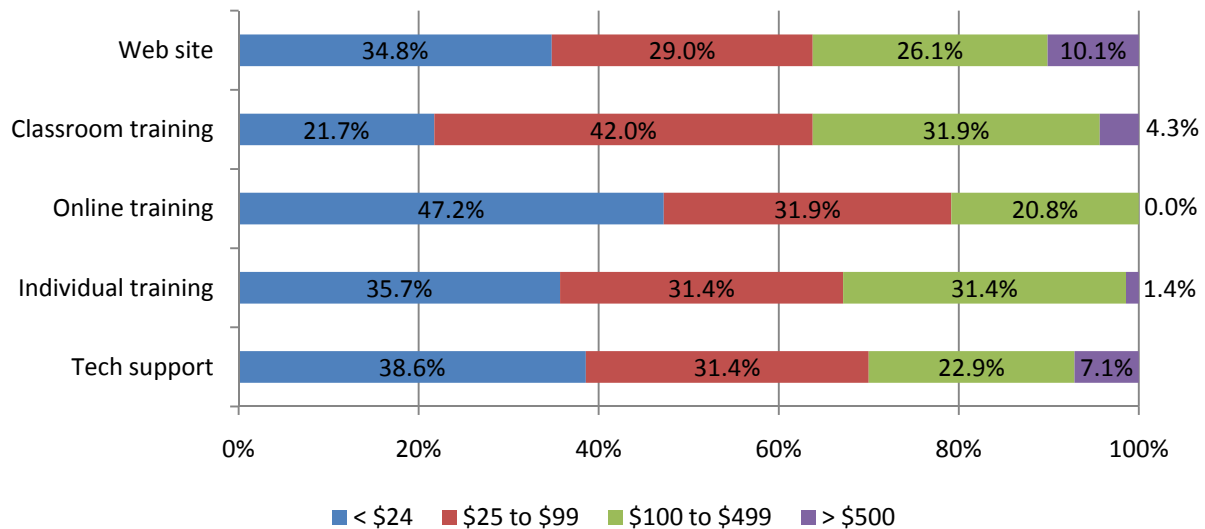
Manufacturers have a higher amount which they are willing to pay (based on the percentage who responded in the over \$500 range) than all other industries for the service offerings of the following:

- Web site resource (16.7 percent for manufacturers; 6.3 percent for all other industries);
- Individual training services (7.5 percent for manufacturers; 1.6 percent for all other industries);
- Technical support services (5.7 percent for manufacturers; 3.1 percent for all other industries); and
- Classroom training (5.7 percent for manufacturers; 2.4 percent for all other industries).

That leaves online training, on which all other industries appear to place a higher dollar value than manufacturers do (2.3 percent for all other industries; 1.9 percent for manufacturers).

Rural Areas: What would be the maximum amount you would be willing to pay for a high-quality program of each of the following:

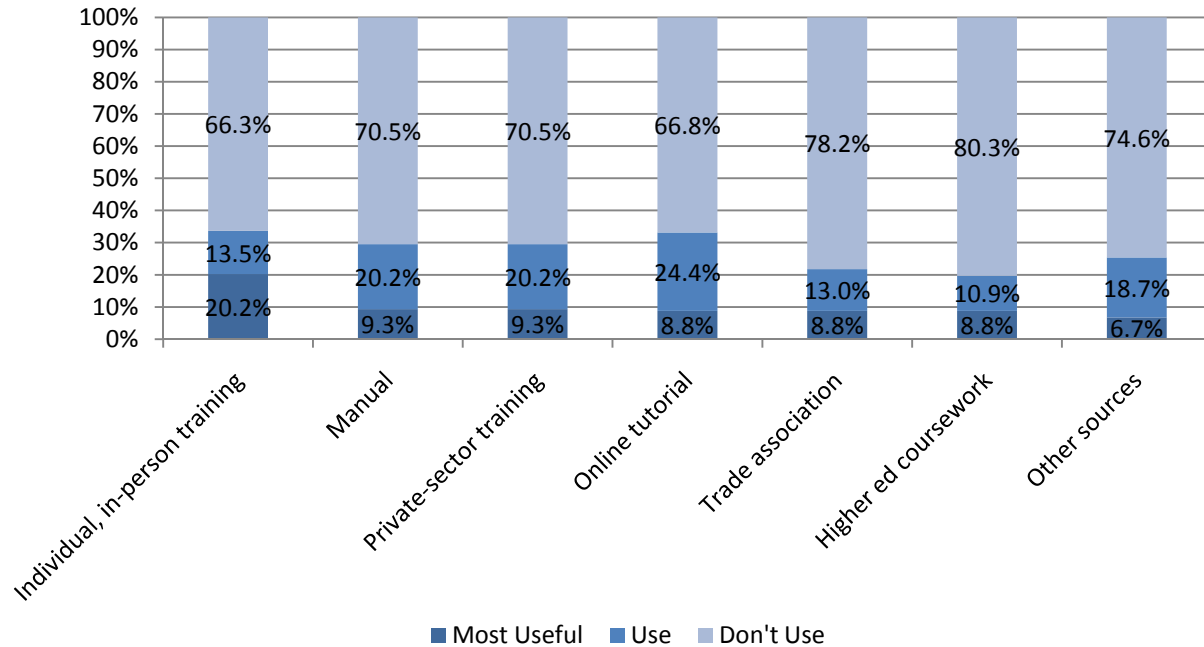
72 respondents



Willingness to pay within the largest price category of more than \$500 per unit increased as a percentage of rural area respondents compared to all respondents in two program areas: classroom training and Web site. This suggests that rural respondents particularly value these types of services.

Which of the following have you, or your employees, found useful to improve your knowledge of e-commerce activities and the technology required to implement them?²⁴

193 respondents



The largest percentage of respondents (20.2 percent) found individual, in-person training/coaching services to be the most useful means of improving knowledge of e-commerce activities. Individual, in-person training is also the area which has been used by the largest percentage of businesses, with 33.7 percent reporting having used it. A similar percentage of respondents (33.2 percent) have used online tutorials. While in-person training had the greatest number of persons who have used it and identified it as the most useful means, online tutorials had among the fewest number of such persons (8.8 percent), which suggests that among those who have tried these two options, in-person training has proved to be more valuable than online tutorials. This is further supported by businesses' higher willingness to pay for private training than other areas, as demonstrated in the previous survey question.

Responses were equal with respect to the usefulness and utilization of a manual or a private-sector training program. Trade association programs and higher education coursework each had 8.8 percent of respondents identifying them as the most useful source used, though more have made use of trade association programs. The final category, "Other sources," includes U.S. Small Business Administration, Small Business Development Centers and other federal and state training programs. A smaller percentage (6.7 percent) had found these other sources to be the most useful to their own or their employees' e-commerce education, although fewer have tried these types of opportunities (25.4 percent).

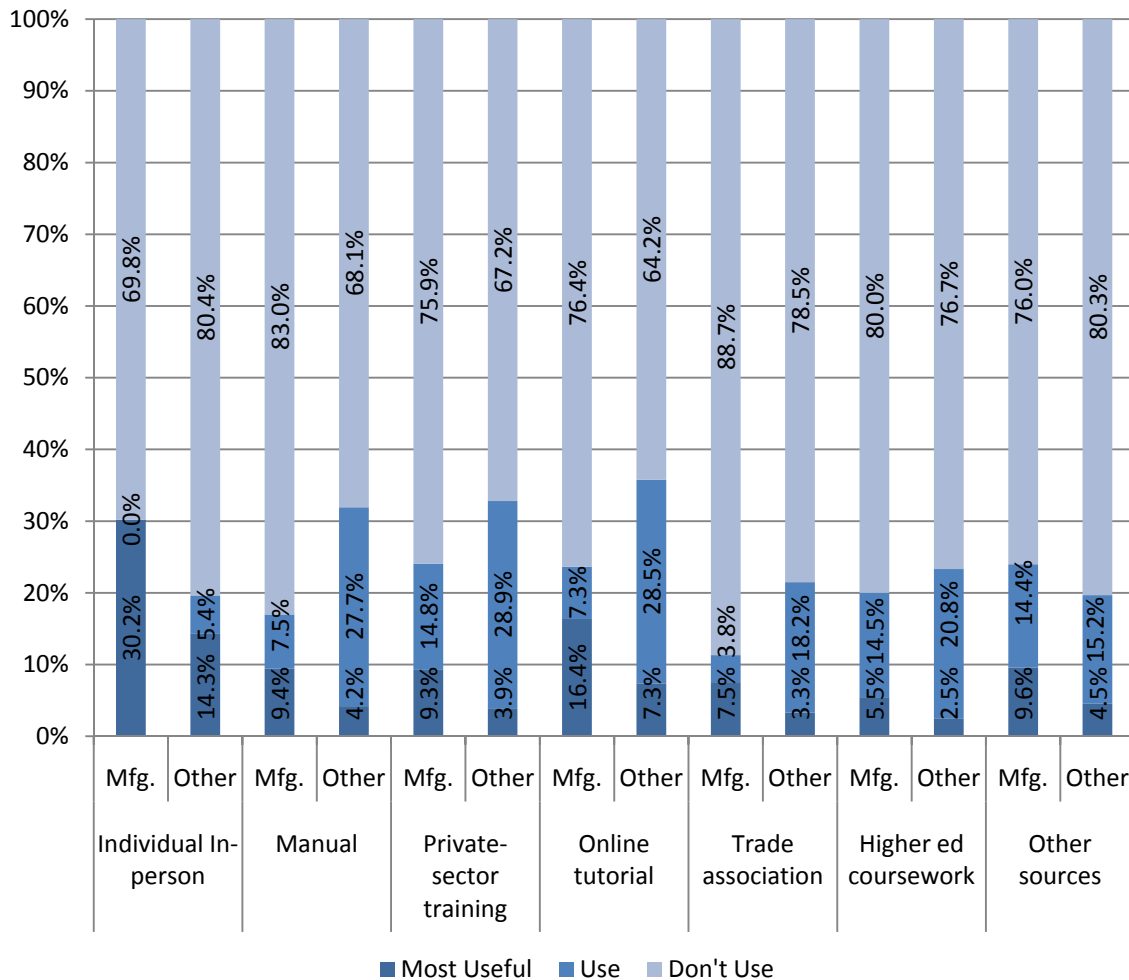
²⁴ This chart divides responses into those who responded that this was the item they most used/relied upon, those who responded that they use the item (but did not also reference it as the one they most used/relied upon), and those who did indicate that they use that item.

About 20 percent said they do not know what training resources have been most useful for either them or their staff (not illustrated). Eight respondents said they did not have any training programs or did not need any.

Manufacturers vs. All Other Industries: Which of the following have you, or your employees, found useful to improve your knowledge of e-commerce activities and the technology required to implement them?²⁵

56 Manufacturers

123 All Other Industries



²⁵ This chart divides responses into those who responded that this was the item they most used/relied upon, those who responded that they use the item (but did not also reference it as the one they most used/relied upon), and those who did indicate that they use that item.

The largest percentage of manufacturers found individual in-person services (30.2 percent) to be most useful to improving e-commerce knowledge. This was also the most useful area for all other industries, though for a proportionately smaller number of all other business types (14.3 percent) than for manufacturers.

Final Comments

The final three questions of the survey provided space for respondents to share stories regarding successful and unsuccessful e-commerce-related initiatives, as well as any additional concluding thoughts. Below are some of their responses.

Please share a story of what you would consider a successful initiative to implement an e-commerce-related upgrade at your company.

- “We once spent hours restocking inventory with our vendors...we now have an inventory control system that will form lists of needed inventory as existing inventory is used, making the reordering task much more efficient.”
- “Our Web site has been updated and we continue to add product to it. This has shown a record number of hits the past two months.”
- “Our company started out as a small business to build control panels for [another company]. When a large expansion was canceled, we had to regroup and find clients. We decided to try e-commerce by registering on CCR and following through with the SBA, HUBZone, and Veteran-Owned. It took about five years, and we began getting emails and calls. E-commerce gives you tools, but you have to get out there and make contacts via phone and e-mail. Customers still like a person at the end to communicate with and know their order is being taken care of.”
- “Every time that [we] implement new software, we look for ways to reduce cost. The latest upgrade was the purchase of a voice-over IP phone system. This has helped to streamline communications and connect our outside reps with the office. We are also able to employ anywhere within the U.S. and still route all phone calls through our published numbers.”
- “Just by upgrading our Web site alone, to a more user-friendly site, we have found it to be a quite successful initiative. By word-of-mouth, those who have visited the site have passed on the information to others. Our customers have found very useful information from the site, and when they needed more answers, they have used the site as their means of communicating with us. However, we are always willing to learn more on how to improve our e-commerce presence for helpful suggestions.”
- “We went through numerous efforts and trials to conduct online distance learning for nurses. The available technology dictates the educational design of what we can offer. The current company still does not have all the technology I would prefer, but it is the best I can afford right now. This also required moving my company from a home-based business to an office space where broadband access was available. My rural home did and still does not have broadband access, and this is still a problem.”
- “I have used my software to e-mail paid invoices to my clients. The business traveler is very fond of this transaction because there is no paper to carry until they return to their office.”

- “Completely revamped our Web site for WSO and SEO. The change dramatically increased our global Web exposure.”
- “In 2008, we created several professional three-minute videos of our company's products/services and added them to YouTube. Potential customers were so excited about the technology and service created by our company, they freely linked our videos to MySpace, Facebook, blogs, and forums all over the Web. This generated a tremendous amount of publicity and media, which led to higher sales.”

Please share a story of what you would consider an unsuccessful initiative to implement an e-commerce-related upgrade at your company.

- “We chased all kinds of different business Web sites and filled out hundreds of registrations. Followed up and e-mailed, kept up the listings for years. Bottom line is you have to get your information to a real person who does the buying or to the person needs your parts or service. Otherwise, filling out all the Internet registrations is like putting in an application and they ask if they can keep it on file for a year. You probably won't hear from them.”
- “We tried using ads on MSN.com search engine. Ad lengths are limited by number of characters so it's difficult to create a good ad; had a 0.1 percent click-through-rate or four clicks out of 4,000-plus views on a person's screen. We just don't think the Internet in general can be effective for marketing services, especially engineering. For this type of service, most potential clients would get a referral if they could before randomly selecting someone from the Internet; we're more likely to get a random phone call from someone local looking at the yellow pages than a random phone call/e-mail from someone miles away looking at an ad on an Internet search engine or even from the result of a targeted search.”
- “Don't know much about computer-related things such as the difference between ‘Flash’ and ‘HTML’ and thus invested lots of time and money in our site to find out later it was all in Flash. In the process of switching it now so it will be better recognized by the search engines.”
- “Subscribed to a software program that was purchased on our behalf and installed/implemented by an independent consultant. A few years later, the consultant wanted a royalty for his efforts and surprised us by letting us know that since the 'license' for the software was under his company's name, he had right to access all the data that had been input by us, and if we did not compensate him, he would seek legal action for using 'his' software. Messy situation that resulted in us re-subscribing to a new license at a high price.”
- “When we first began, there were no companies providing contracted learning management systems. We tried to manually manage the learner registration and tracking, but it proved to be far too labor-intensive. So we had to wait until these services became available.”
- “We recently added supplier's products to our Web page. If you go to our Web page you will see a variety of brand logos. From this we expected to get many inquiries. Nothing has happened.”
- “We tried employing a business development manager to oversee our customer relations management system. It was a good idea and improved our understanding of the CRM software, but our type of business does not warrant a full-time person.”

- “In 2006, our first attempt at the online store was less than desirable. We tried to use an existing shopping cart that did not fit our product line and made it too difficult to support. It was impossible to track new customers and orders, which led to manufacturing and shipping delays. The Web site design team (and I) learned a great deal during our first six months in business. We ended up creating our own shopping cart and calendar to fit our unique products and services.”

Other Comments

In the last question of the survey, which provided a final opportunity for businesses to share thoughts, there were two primary themes: (1) the limited accessibility of broadband services in rural Georgia; and (2) the difficulty of finding the type of professional technical expertise needed to launch a Web site or e-commerce initiative. These themes were consistent with both survey findings and feedback received at the three focus groups.

FOCUS GROUP FINDINGS

Three focus groups were held to supplement the survey findings. The focus groups were conducted throughout the state; specifically in Albany, Swainsboro, and Carrollton. A total of seventeen people participated in the focus groups, which were held between November 2008 and February 2009. Participants represented a range of businesses (e.g., an agricultural firm, an alarm system sales company, an engineering design and consulting service, a gift basket retailer, an industrial battery regeneration company, a menu and other restaurant accessory supplier, and a children and pet gate manufacturer).

The following e-commerce-related concerns and needs were shared by participants in the focus groups.

Vendor Selection

Businesses want a better understanding of how to determine the right vendor or the best approach for creating a Web site, or pursuing another e-commerce-related activity. The focus group participants' consensus was that there are an overwhelming number of options and potential vendors, and not enough objective assistance for navigating these options and determining the best course of action. In the words of one participant, when it comes to picking a Web site vendor, “businesses do not know what they do not know.”

According to participants, too much existing information comes from businesses marketing their company under the guise of educating the audience. Whether speaking about the sponsor of a curriculum, the teacher of the class, or the publisher of a resource guide, the audience's perceived objectivity of the source is vital to fostering the trust needed to make the learning experience valuable. Participants identified peer-based networking opportunities as a favorable means of garnering testimonials and recommendations from presumably objective sources.

Resource Guide

Businesses desire a clear, step-by-step guide to implementing an effective e-commerce strategy. According to focus group participants, a key element of that guide would be a list of recommended vendors to consider for implementation (i.e., who to buy a URL from, who to host the Web site, which service to use to track customers, which e-mail marketing campaign Web-based service to use, what blogging service or social networking site to use).

Web Site Design

One of the focus groups had a discussion regarding the specific challenges of working with Web site development vendors. These participants agreed that too often these vendors have very good expertise in the technical side of Web site development, and can create very aesthetically pleasing designs; however, the challenge is that developers often do not have much first-hand expertise in effective marketing techniques. A developer-marketer team was determined to be the best type of firm to use for Web site development.

Peer-Based Learning

Participants said often their preferred means of learning is from their peers. Participants find networking opportunities to be very beneficial to developing relationships which can lead to peer mentorships. They recommended networking activities be included in any new e-commerce learning programs or other opportunities which may arise.

Internet Access

Internet access in rural Georgia was an expressed concern, affirming findings from the survey. The focus group participants not only spoke about access as a challenge for businesses, but also for their potential customers in rural Georgia. As stated by participants, in some areas of rural Georgia the only Internet access is at the public library, making outreach to the customer base a challenge (which can become a disincentive for businesses to dedicate resources to e-commerce activities, thus limiting their growth potential).

Businesses' Questions

The remainder of the focus group discussions covered more specific questions from the businesses; for example, how to:

- Implement an internal-access-only Web site (i.e., Intranet site);
- Create an off-site data backup system;
- Optimize search engine results;
- Make the first electronic marketing contact with a perspective customer;
- Track the number of hits on a Web site;
- Maximize the potential of advertising on Google, Yahoo, and similar resources;
- Offer secure online business transactions;
- Weigh the pros and cons of a proprietary webcast verses one on YouTube; and
- Conduct webinars, on-line chat applications, and mobile applications.

The focus group feedback reaffirmed certain areas of the survey - for example, regarding Internet access concerns in rural Georgia - and brought some new subjects to the forefront. Most prominently, there was clear consensus that businesses desire more opportunities to network with their peers and receive objective recommendations regarding what e-commerce-related vendors to use.

OTHER RESEARCH FINDINGS

E-commerce has been celebrated by many for the opportunities it creates for businesses of all sizes and types to maximize their profitability and access new markets. However, a deficit of research still remains, at least research specifically addressing the particular experiences of rural small businesses and the challenges to incorporating new technology into their business practices.²⁶ A few studies enlighten the discussion raised by this survey and focus group process, affirming findings in most instances and providing some additional insights on the subject.

The U.S. SBA 2002 study of companies between one and 249 employees found that although 83 percent of businesses used e-mail and 57 percent used the Internet to communicate and gather information, only 35 percent routinely sold products or services online.²⁷ This figure is much lower than the 66.7 percent of Georgia's businesses who participated in this project's survey and reported selling products or services online. The difference may be in part, due to progress made in the seven years since the SBA survey.

Even for businesses not engaged in electronic retailing, or "e-tailing," the SBA survey respondents noted that Web sites helped businesses gain new customers (67 percent), improve competitive position (62 percent), increase total sales (56 percent), and attract new types of customers (56 percent). Sixty-five percent of firms said their Web sites generated enough additional profit to pay for themselves. Although business-to-business (B2B) sales make up an overwhelming majority of e-commerce transactions, it was discovered that less than 10 percent of small business transactions were B2B. The study concluded that while the Internet offers "unparalleled opportunities" for small businesses, the most successful companies recognized which technologies could benefit their business and still be cost-effective.²⁸

A 2007 study focused on small businesses in rural Pennsylvania concluded that businesses should conduct a thorough cost-benefit analysis before engaging in e-commerce and understand the business implications of such activities.²⁹ The concept of facilitating the expansion of a business' analytical capabilities - specifically, which e-commerce products or services to use affirms this project's survey finding that Georgia's rural businesses desire a greater understanding of how to make these types of decisions. Such careful consideration is especially important given Auger's 2005 survey of 167 small businesses (fewer than 1,000 employees) that determined that a Web site's overall technical sophistication did not significantly increase its profitability.³⁰ At the same time, the study showed that a Web site's interactive capability was positively associated with increased sales because it provided an "additional channel of communication" to improve convenience and trust.³¹ This research suggests that small businesses need to understand which technologies will be most beneficial before they invest or upgrade.

The Pennsylvania study also included in-depth interviews with a dozen small-business owners or managers who have successfully deployed an e-commerce strategy. The researchers found leadership commitment and enthusiasm about e-commerce as the top reasons for their success. These findings align with other research contending that while many companies try to "sprinkle Internet

²⁶ Bharadwaj P. and Soni R. (2007). E-Commerce Usage and Perception of E-Commerce Issues among Small Firms: Results and Implications from an Empirical Study. *Journal of Small Business Management*. 45(4): 501-521.

²⁷ Pratt, J. (2002). E-Biz: Strategies for Small Business Success. *Small Business Administration Office of Advocacy*. Accessed April 1, 2009 from <http://sba.gov/advo/research/rs220tot.pdf>

²⁸ Ibid 32-33.

²⁹ Bharadwaj P. and Soni R. (2007).

³⁰ Auger, P. (2005). The Impact of Interactivity and Design Sophistication on the Performance of Commercial Web sites for Small Businesses. *Journal of Small Business Management*. 43(2): 119-137.

³¹ Ibid 133.

responsibilities throughout the company - a little Web site here, a little brochure-ware there," - e-commerce typically requires considerable dedication of organizational, human, and financial resources to maximize its return.³² Dubelaar asserts that e-commerce requires a "creative link" between an organization's adopted business strategy and the adopted technology to ensure that the applications are smoothly integrated into the company's operations.³³ Companies that lag behind are those that tend to assign the responsibility to the Information Technology (IT) department rather than the senior business managers, leaders, and strategists.³⁴ For Georgia's rural businesses participating in this project's survey, leadership commitment to implement e-commerce initiatives did not arise as a prevalent issue, with 50.7 percent indicating this has not been a challenge for them. However, with 7.8 percent identifying it as an impediment and an additional 14.6 percent identifying it as a challenge, one in five business leaders in rural Georgia may benefit from a broader understanding of the value of e-commerce to their enterprise's future.

The Pennsylvania interviewees identified a lack of necessary infrastructure as one of the major challenges to providing uninterrupted Internet access or to support Web-hosting services, a concern raised in both the survey and focus groups of this project.³⁵ The problem is common in rural areas throughout the United States. Enhanced broadband Internet access can increase e-commerce sales by increasing customer access, and for more specific concerns, like enabling businesses to provide pictures or videos of their products or participate in video conferencing with customers, suppliers, and distributors.³⁶ The American Recovery and Reinvestment Act of 2009 recognized the importance of broadband access and authorized \$7.2 billion for infrastructure expansion projects in all 50 states.³⁷ Aside from the construction jobs, the goal of the stimulus is to create jobs in rural areas that use e-commerce and other online services. Columbia Business School Professor Raul Katz acknowledges the potential for job creation but emphasizes the need for "job training and economic development programs that will encourage people in the areas being wired to take advantage of the new connectivity."³⁸ Consistent with this conclusion, in this project, 35.7 percent of respondents said staff knowledge to implement and operate e-commerce activities is a challenge; that percentage rose to 39.7 percent for the rural businesses.

Online security can be another detriment to e-commerce. After all, 3.6 million adults were victims of "phishing" scams between August 2006 and August 2007, which cost the American economy more than \$3 billion.³⁹ Although customer concern with online security was not the greatest challenge identified by respondents in this project's survey, 16.2 percent found it a challenge, and an additional 21.2 percent found it to be somewhat of a challenge (for rural businesses, those percentages were 16.9 and 26.0, respectively). To complete a transaction, customers must trust that the Web site from which they are purchasing is secure and the company will safeguard sensitive information, such as credit card numbers.⁴⁰ In addition, consumers often worry that vendors will engage in opportunistic behaviors like

³² Kantor, R. (2001). The Ten Deadly Mistakes of Wanna-Dots. *Harvard Business Review*, 79(1): 91-100, 93.

³³ Dubelaar, C. et al (2005). Benefits, impediments and critical success factors in B2C E-business adoption. *Technovation*, 25: 1251-1262, 1251.

³⁴ Willcocks L. and Plant R. (2001). Pathways to E-Business Leadership: Getting from Bricks to Clicks. *MIT Sloan Management Review*, 42(3): 50-59.

³⁵ Bharadwaj P. and Soni R. (2007).

³⁶ Malecki, E. (2003). Digital development in rural areas: potentials and pitfalls. *Journal of Rural Studies*. 19: 201-214.

³⁷ Condon, S. (10 March 2009). High interest in broadband stimulus spurs public meetings. *CNET News*. Accessed March 25, 2009 from http://news.cnet.com/8301-13578_3-10193023-38.html

³⁸ Ibid.

³⁹ Litan, A. (13 December 2007). Phishing Attacks Escalate, Morph and Cause Considerable Damage. Accessed March 25, 2009 from www.gartner.com.

⁴⁰ Wan, A. (2000). Opportunities to enhance a commercial Web site. *Information & Management*, 38(1): 15-21.

unfair pricing, conveying inaccurate information, and other unethical activities.⁴¹ Once a positive relationship is established with a company, however, consumers show increased loyalty to the product and the company over time, resulting in increased profits and other customer referrals.⁴² Small businesses sometimes must work especially hard to earn customers' trust because their companies may be less familiar to online customers. Online security is also a concern for the businesses themselves so financial information is not compromised or products sold to bogus clients. A 2003 study on Prince Edward Island, Canada determined that 50 percent of small businesses rated security as their highest concern with e-commerce transactions, second only to privacy (54 percent).⁴³

Despite those fears, however, the Canadian study found that 55 percent of businesses planned to add online sales technology to their Web sites within three years. The study's authors note that these intentions create the need for small-business education to develop, manage, and maximize this e-commerce strategy. In fact, 63 percent of Small and Medium-sized Enterprises (SMEs) said they would be receptive to training to make their organizations more successful in e-commerce.⁴⁴ Although 59 percent of respondents said they could not afford for employees to take time off for e-commerce training, half said they would consider evening classes. Classroom training was the most popular (50 percent), but 37 percent said they would also consider online training, which affirms the finding of this Georgia-based project that classroom training is preferred to online training.

The existing research has identified several e-commerce issues specific to small businesses and some that pertain predominantly to rural small businesses, such as broadband access, much of which affirms the findings of this research project. Although many firms have incorporated e-mail and Web sites into their business practices, online sales raise additional technology and security concerns. Previous research and this project found one of the most important considerations is helping small businesses objectively analyze their options, through a cost-benefit approach or otherwise. Given the growing number of business success stories, e-commerce appears to hold incredible potential for small rural businesses in Georgia.

⁴¹ Gefen, D. and Straub, D. (2003). Managing User Trust in B2C e-Services. *e-Service Journal*. 2(2): 7-24.

⁴² Morris, D., Barnes, B. and Lynch, J. (1999). Relationship marketing needs total quality management. *Total Quality Management*, 10(4-5): 659-665.

⁴³ Murray, B. (2003). The Prince Edward Island Information Technology Study of Small and Medium Sized Enterprises. Accessed April 2, 2009 from http://www.murraytechnology.com/murray/IT_percent20Study.pdf

⁴⁴ Ibid.

CONCLUSION

Businesses throughout Georgia are interested to learn how they can make better use of e-commerce opportunities to achieve their full sales potential. Creative business practices, such as e-commerce, become increasingly important in tough economic times. Therefore, this process coinciding with the economic downturn of 2008-2009 was fortuitous timing for educating Georgia's economic development leaders regarding how to best serve the e-commerce-related needs of rural Georgia.

Summary of Findings

The survey and focus group findings complemented each other in many ways, reaffirming findings where they intersected and sharing additional perspectives where they did not. Recurring themes and primary findings of the research process were:

- Businesses must first overcome any financial challenges before they can implement fee-based e-commerce activities, or pursue any potentially costly learning opportunities regarding e-commerce.
- There is strong interest in more learning opportunities, particularly in-person classroom-based ones, as well as other educational resources like what could be made available on a Web site. The interest here likely arose from the many businesses in the survey who found staff knowledge to implement e-commerce initiatives to be an impediment or challenge to the company pursuing an expansion of these efforts.
- There are many questions regarding how businesses can best access and leverage technical support services. Particularly emphasized by those participating in the focus groups, businesses desire to be more informed - by objective sources - on how to choose among the many available support services, resources, and products. As evidenced by survey findings, rural businesses have the additional challenge of accessing professional services, which are often located in urban areas.
- Broadband access in rural Georgia remains a challenge, preventing these businesses from experiencing the full potential of the 21st century economy.

The primary intent of the survey and focus groups was to ascertain what the needs and preferences may be for informing future educational services to assist businesses in rural Georgia with their e-commerce activities. Based on the findings, the following appear to be the consensus response from participants.

Course Scheduling and Logistics

There appeared to be strong support for the idea of a half-day training program with a networking component, possibly tied into an existing conference or other event. Approximately 30 percent of survey responses found a class of some kind to be of most value to these companies' efforts to educate themselves or their staff, and 50 percent said classroom training would be something they would probably or definitely use. A measurement of willingness was reflected through the 32 percent of respondents who said they would pay up to \$499 for such a course, and the 39 percent who said they would pay up to \$99. The concept was also well-received by focus group participants, who recommended the half-day duration and networking component considerations.

Focus group participants also emphasized the value of a "how to" manual as the primary course material. This concept is supported by the approximately 10 percent of survey respondents who said a professional training manual was what they have found to be most useful to their e-commerce-related professional development.

Course Content

The following bullets outline the potentially most desirable subjects to cover in the course and its “how to” manual.

- Each of the focus groups pointed to the need to better understand how to identify the best vendors to serve their specific needs.
- The desire to add a feature for customers to check the status of orders was also something referenced by focus group participants, and reiterated in the survey findings.
- Discussion boards, blogs, and similar tools were of interest to survey and focus group participants, but not something that most had implemented.
- Focus group participants and survey respondents both noted search engine optimization as something they desire their Web sites to do more effectively.
- Survey respondents said their greatest challenge concerning e-commerce implementation was the availability of financial resources to do so. Thus, a course component that highlights available U.S. Small Business Administration, Small Business Development Center, and other state and federal resources on which businesses may draw to support e-commerce implementation may be a strong attraction and beneficial learning experience.
- Individual, in-person instruction and assistance was something that a significant portion of respondents said they would definitely use (29 percent), and it is what the largest number of respondents (20 percent) said had previously proved most useful in their e-commerce knowledge development. The willingness to pay for this service was pronounced, with 25 percent willing to spend up to \$499 and an additional 38 percent willing to spend up to \$99. Conceivably options could be considered that would incorporate this type of instruction into the course (for example, maybe include in the cost of tuition a certain number of one-on-one hours with the instructor after the course to address any follow-up questions).

The survey responses and focus group feedback suggest there is strong demand for courses and workshops focused on e-commerce implementation. Further, the findings were very informative for gaining a sense of what structure and content would be the most beneficial to businesses in rural Georgia.

The findings also resulted in some additional considerations for Georgia. Most pressing is the question of broadband access for rural communities. Those people who are connected daily to the Internet now take such access for granted, so are not always aware of the many that remain unconnected. Expanding broadband coverage will enable rural businesses to access the economic opportunity of a much wider customer base, and help the customers to reach products and services they otherwise may be unable to obtain.